

Reader's digest



Saving Our Sea Turtles

One Couple's 30-Year Quest

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Reader's digest



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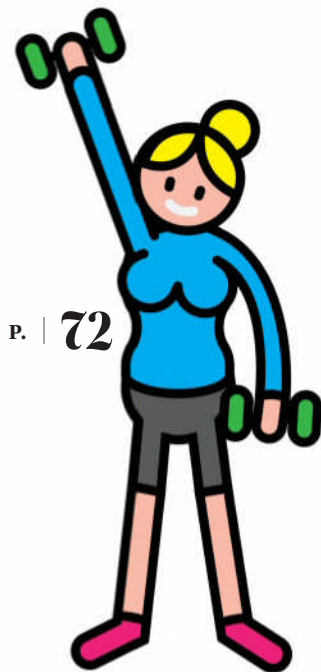
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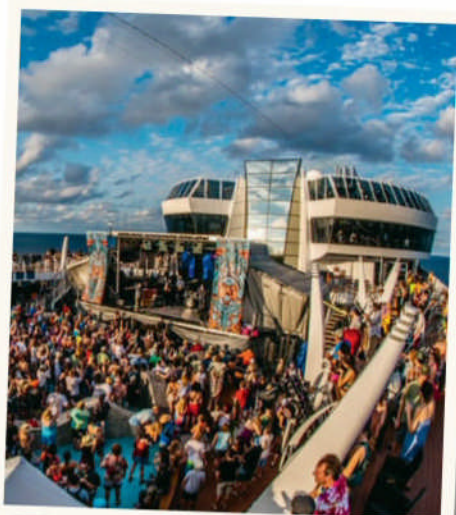
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Letters

READERS' COMMENTS AND OPINIONS

True Grit

I got a lump in my throat reading Connie Schultz's article about visiting the factory where her late father worked ('A Different Kind of Genius', June). Both of my parents held factory jobs, and my first job was also at a plant. After that first tough week, I appreciated the grit my parents had shown every day, and I was thankful for the sacrifices they made to provide for me. I'm glad that Connie now feels the same way.

T. S.



Dylan's Comeback

I was so happy to hear of the amazing progress Dylan made after his accident ('The Miracle of Dylan's Brain,' May), but it is disturbing to think of the many traumatic brain-injury patients at the mercy of insurers so impatient to cut costs and pull the plug. We live in an era of amazing medical technology, if you can afford it.

JERRIE HILL

Odd Uses for Everyday Items

After reading 'My Tea Does What?!' (April), I decided to try

toothpaste as a brass tarnish remover. It was so-so.

However, a menthol vapour rub cured me of toenail fungus easily. Could it remove tarnish from brass? Yes. It did a better job than the toothpaste!

JOSEPHINE ARIFF

Keeping the Mind Healthy

I subscribe to a few magazines every month. I love Reader's Digest magazine the most because it

provides a lot of useful information for getting through the challenges of daily life. However, many magazines report on

LET US KNOW

If you are moved – or provoked – by any item in the magazine, share your thoughts. See page 6 for how to join the discussion.

the sordid scandals of celebrities or groundless conspiracy theories. This is unhealthy information.

But your magazine provides useful information and also broadens readers' knowledge, which is healthy for us. **ATHENA CHAU MEI YAN**

Superhero Teacher

'In Defence of the Uncool Kid' (My Story, April) rekindled my superhero aspirations. As a teacher, my focus is to achieve my daily tasks and goals, but I sometimes forget about my students. A class where students feel secure is not a given and takes teachers and students like Michelle Siever to forge. I guess I'll have to put on my best cape, pick up my most powerful weapon and garb myself with an iron will to stand up for my students, whom I love.

MICHELLE TAN

WIN A PILOT CAPLESS FOUNTAIN PEN

The best letter published each month will win a Pilot Capless fountain pen, valued at over \$200. The Capless is the perfect combination of luxury and ingenious technology, featuring a one-of-a-kind retractable fountain pen nib, durable metal body, beautiful rhodium accents and a 14K gold nib. Congratulations to this month's winner, Michelle Tan.



Tortoise Mail

We asked you to think up a funny caption for this photo.

Genuine hard case. **DAVID MORGAN**

I may be slow but I am still going places. **JEN2 CHNG**

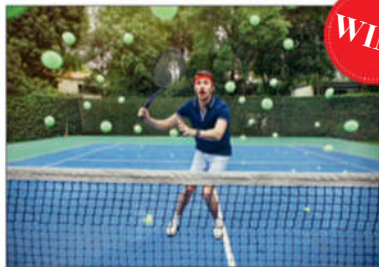
Step aside folks, I'm on an adventure. **JOHN H. STOFMEEL**

Hare, we've got to take this relationship SLOW. I come with a lot of baggage.

JENNIFER ELIZABETH SCULLY

Moving SHELL-ter. **MILENA BONITE**

Congratulations to this month's winner, David Morgan.



WIN!

CAPTION CONTEST

Come up with the funniest caption for the above photo and you could win \$100. To enter, see the details on page 6.

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Anecdotes and jokes

Send in your real-life laugh for
Life's Like That or All in a Day's
Work. Got a joke? Send it in for
Laughter is the Best Medicine!

Smart Animals

Share antics of unique pets or
wildlife in up to 300 words.

Kindness of Strangers

Share your moments of
generosity in 100-500 words.

My Story

Do you have an inspiring or
life-changing tale to tell?
Submissions must be true,
unpublished, original and
800-1000 words - see website
for more information.

Letters to the editor, caption competition and other reader submissions

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Editor's Note

A Pioneering Spirit

RETELLING GREAT MOMENTS in history doesn't come easily – even for the most experienced writers. But this month's Bonus Read recounts the challenges faced during aviator Charles Lindbergh's solo flight across the Atlantic Ocean in May 1927. During the 33 hours and 30 minutes it took him to fly from New York to Paris, the 25-year-old Lindbergh faced extreme cold, poor visibility and fatigue – but not once lost his drive to succeed. In 'Flight Over the Atlantic' (page 102) writer Dan Hampton vividly portrays both how wonderful Lindbergh's achievement was for aviation, but also the huge excitement and buzz it gave him personally. It's what lies at the heart of all pioneering feats.

On the other end of the adventure scale, getting lost while on holiday is something most of us have experienced. 'Where On Earth Am I?' (page 52) takes getting lost to an entirely new level. This is the story of Noel Santillan, who travelled to Iceland, hired a car, then programmed its GPS to navigate him to his hotel 40 minutes away. He ended up 362 kilometres off course and in the middle of nowhere. But it's also where his holiday started to get interesting. Thanks to the confused GPS, Santillan literally became a national obsession. This is one holiday experience he nor the people of Iceland are likely to forget.

Have you ever found yourself a long way from home only to discover something wonderfully unexpected? Share your story for our My Story pages. Turn to page 6 to contribute.

Happy reading!

Louise
LOUISE WATERSON
Managing Editor



Chasing Jackie

Former US First Lady Jackie Kennedy inspired a young girl to follow in her footsteps – all the way to Angkor Wat

BY JULI ANN WEBER

Juli Ann Weber became a foreign correspondent specialising in international business, finance and economics while living in Asia during the 1980s. She now lives in Cambodia, where she teaches advanced English, and continues to write.

WHEN JOHN F. KENNEDY had been president of the United States, he and his glamorous wife, Jacqueline, lived in the White House. I was a teen at the time and, like many, idolised this sophisticated and elegant First Lady. So, when the widowed Mrs Kennedy appeared on the news one night in November 1967, I paid attention. There she stood, in front of these amazing carved stone towers. Jackie Kennedy was visiting Cambodia and touring the temple complex of Angkor Wat.

In that singular instant, I knew I had to go to Angkor Wat.

This wasn't unlike me, as ten years earlier, when I was seven, I had announced that I wanted to go to China. Everyone – from my parents, teachers and classmates to relatives and neighbours – poo-pooed the idea. China was closed. No foreigners were admitted. Everyone insisted there was no way to go to China. Every time I mentioned China I'd be met with adult cautions: "Forget it! You're not going to China."

But China was on the other side of the world, the world was round, and if I dug a hole in the backyard, I heard that I'd end up in China. So I dug a hole. At seven, digging a hole in the backyard with a small trowel is a tedious and time-consuming undertaking. Despite digging deep, China remained far, far away. The project



In 1967, Jacqueline Kennedy fulfilled her 'lifelong dream' of visiting Angkor Wat

consultant in Indonesia. Moving to Singapore, I became a foreign correspondent, and then moved to Hong Kong.

After a few more years of working there to save up the money, in 1990 I got to China at long last. I spent several months 'riding the rails' around the massive country. I saw the Great Wall, the Terracotta Army in Xi'an, and so many other places seen in magazines or on television, places I had

read about. It was a marvellous experience, much appreciated after waiting so many years since I tried to dig that hole to get to China.

During the years I lived in Asia, Cambodia was closed, as China once had been. The horrors of the Khmer Rouge were over, but the Vietnamese were there. Unexploded ordnance remained from the Vietnam War, as well as landmines planted border-to-border, rice paddy-to-rice paddy. It was a most perilous place. Despite meeting with people from the United Nations and various nongovernmental

ended with planting a potato, which did produce enough potatoes for one family dinner.

Minor success – of a sort.

As years passed, that image of Jackie Kennedy at Angkor Wat remained in my mind. So, too, did the images of China.

It took me decades to get to China. The country began opening while I was still at school, and I paid attention to progress in international relations, slow as it seemed. Eventually, after graduate school in 1981, I wound up working as a training

organisations, nobody could get me into Cambodia. It was locked up as tightly as China once had been. They said to forget about going to Cambodia. It would take decades to recover from the devastation of the Khmer Rouge.

My Asian adventure ended shortly after departing China on the Trans-Siberian Railroad. My father had a stroke. Returning to the US, I 'got stuck' there for years with one thing or another. My plans to move back to Asia kept getting derailed.

Finally, in 2015, I had had enough of living in America. Time could well be running out, and I had a 'bucket list' of things to do, places to go.

Cambodia came up on my radar. The country was open and eager to develop. It had monumental needs, and I could help fulfil some of them. I had taught English as a foreign language, and taught a wide variety of writing courses in various countries. There were no age restrictions on employment visas in Cambodia, unlike so many other countries.

With that long-held image of Jackie Kennedy at Angkor Wat still clear in my mind, the die was cast: move to Cambodia. The proceeds from the sale of my car paid for a plane ticket and a small amount to live on while I looked for a job.

I arrived in Cambodia on November 11, 2016, and, within two weeks, my assessment of the country's needs had proven accurate.

Part-time teaching will keep me going here in Phnom Penh, while I save for the bus fare to Siem Reap and admission fees to the Angkor complex: Angkor Wat, Angkor Thom, the Roluos Group and other outposts of the splendid Khmer Empire of a millennia ago.

The first night with my new students, they asked why I came to Cambodia. I told them the story of a child watching America's First Lady, Jacqueline Kennedy, on the nightly news. And that I had known the moment I saw those temple towers of Angkor Wat that I must go there. I mentioned the years of living in Asia, with never a chance to come to Cambodia, to see Angkor Wat.

"Now I have arrived in Phnom Penh, and I will go to Angkor Wat. It is going to happen after keeping that image in my head for almost 50 years.

"Never give up!" I told them. "If you really want something, sooner or later you will find a way to make it happen."



With that long-held image of Jackie Kennedy at Angkor Wat clear in my mind, the die was cast

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Thank you, Mr Italy

A confused traveller has a good reason to say *grazie*

BY M.K. GIRI

M.K. Giri, PhD, is interested in sustainable development and biodiversity conservation. A former Reader in Zoology at Tribhuvan University in Nepal, he is now retired. He lives with his wife in Auckland, New Zealand, and enjoys going on nature walks.

BACK IN 1988 I was working at the University of Bonn in Germany as a research fellow. I took some time off in early May to visit a friend, who was the director of a museum in Viterbo, in central Italy. I set out by train, planning to visit him for three days. The train trip from Bonn to Rome followed the dramatic landscape carved by the Rhine, stopping along the way in Frankfurt, Heidelberg and Stuttgart. From there, the train crossed the Swiss border to reach Zurich, winding through valleys and along hillsides, and entering a number of tunnels as it made its way through the Swiss Alps. It was all so picturesque.

The train then crossed the Italian border before passing through Milan and Florence, then finally stopping in Rome. I was lucky, as my hotel was close to the railway station. The next morning I had a coffee at a nearby café, then eagerly set out to visit as many of the famous Roman landmarks as possible. By the day's end, I had managed to see the Colosseum, Altare della Patria (National Monument to Victor Emmanuel II), the Trevi Fountain and Vatican City.

The following day I headed back to the train station, intending to take a short train ride to Viterbo to meet up with my friend. When I arrived at the station and attempted to locate the correct platform, I quickly realised that the station was closed for an upgrade. For a moment my mind went blank and I did not know what



to do. My biggest problem was my luggage – my suitcase and hand luggage were heavy so I couldn't move about easily. As I don't speak Italian, I could not ask anyone for instructions. I dragged my suitcase about 100 metres to a nearby motor mechanics. A tall, sturdy man of about 50 years of age was working there and I excused myself and asked where the nearest station was. I am sure that he did not understand me properly but he could easily guess that I was looking for a station. He replied, but I did not understand.

He smiled, wiped his hands and said something, which I guessed to mean 'Come along'. So I dragged my suitcase along and followed him. He opened the door of his car, motioned to me to get in and then drove for a few minutes to the next station. I got

out, unloaded my luggage, then shook his hand with thanks. He smiled back and drove away.

There was no time to hug or exchange names. I understood that he was busy and was in the middle of his work. I was moved so much by his generosity that I have never forgotten him. He was working and could have easily ignored me but, instead, he chose to help. He went the extra mile on that day. I was completely overwhelmed and I have told this story to many to prove that there are good people everywhere in the world.

Thank you, Mr Italy!

I then boarded the train and arrived in Viterbo a couple of hours later.

Share your story about a small act of kindness that made a huge impact. Turn to page 6 for details on how to contribute and earn cash.

Smart Animals

There are often good reasons behind animals' actions



The Runaway Hen

ADRIANTO WIDYADHANA

It is not fair to think that chickens make duller pets than dogs. Scientifically, this may be the case but in real life they, too, manage to surprise you.

I live in a small village called Dawukan on the island of Java, Indonesia. We have a small flock of five hens and seven roosters, two turkeys and two ducks. We keep them in a small barn right next to our house.

One day, during the dry season of 2015, we went to the barn to feed them and only counted four hens. The one that was missing was our eldest; we'd had her for three years and she is one of my favourites. Her name is Putih, which literally translates to 'white' in Indonesian because of her feather colour.

I called my father and we began

You could earn cash by telling us about the antics of unique pets or wildlife. Turn to page 6 for details on how to contribute.

ILLUSTRATIONS: EDWINA KEENE

to search. We spent a full day searching the entire village but could not find her anywhere. Heartbroken, I went home wishing her the best of luck in the outside world.

The next morning, I went about my daily routine and found a wonderful surprise. There, pecking at the barn door, was my beloved hen, and she was not alone. By her side stood a very handsome rooster.

A Very Wily Dingo

LAWRENCE CLARKE

As a boy of 12, I had a pet dog that was three-quarters dingo. The dingo is a native Australian wild canine that has earned the possibly unfair reputation of being both cowardly and cunning. The word 'dingo' is now an established part of the vernacular as a substitute for 'coward'.

I'm not sure which applied to my two-year-old four-legged friend, Homer, but on several occasions I observed instances of both. These occurred when he accompanied me to the local ferry wharf in Balmain, Sydney, where I liked to fish and he liked to swim.

There was a grocery shop adjacent to the wharf and in it resided a large German shepherd. To get to the wharf it was necessary to walk around a long curving fence at the end of which the wharf and the shop would come into view. Homer



clearly valued his hide more than he did his swim because as we neared the point where the shop could be seen, he would begin to walk tiptoe as though sneaking up on a quarry.

At the end of this stealthy approach, if the German shepherd was spotted, he would immediately about-turn and head back home, tail between his legs.

It could have been cowardice; I prefer to think it was animal cunning. A very smart dingo!

Good Fences Make Brave Dogs

LINDA SMITH

Our family dog Bunny, a Jack Russell cross, goes to a gap in our back fence every afternoon. On the other side is an alleyway, and Bunny waits for a black Labrador who passes each day at 3.20pm.

As he passes, both dogs participate in a round of aggressive barking and growling through the small gap, and then stalk away.

One afternoon I spotted Bunny hiding behind our shed, his tail between his legs and his ears down, as the Labrador marched past the fence as usual. It was then I realised that I'd left the gate open.

Apparently, Bunny only shows his aggression behind the safety of a closed gate!



Unbelievable

TRUE TALES TOLD TALL



The Imaginary Invalid

Is hypochondria all in the mind? asks Nury Vittachi



I DON'T ALWAYS Google my common cold symptoms but when I do I have the Black Death, pregnancy and a disease only horses get. This is not actually that surprising.

I've had every disease known to man, except hypochondria, and I'll probably

catch that from a toilet seat today.

But I do admit that some diseases are definitely from the mind. There's a sign hanging from the ceiling at a hospital near where this columnist lives that reads: 'Beware of your head.' Wise advice.

Consider a letter I received from a reader in Thailand about a recent

ILLUSTRATION: ISTOCK

murder. A man was found dead in Chiang Mai with 15 bullets fired into his rear end. Investigators, puzzled by the mode of execution, learned that a woman had been seeking a cure for her husband's constipation. As one would, they consulted a witchdoctor, who confirmed that a "death by constipation" curse existed, but a spell to remove it could be had for the equivalent of US\$2900.

So far, so relatively normal. But later, the couple remembered that a family member had died of constipation ten years earlier. OMG! Clearly, the witchdoctor was a serial killer whose *modus operandi* was to remotely shut down people's digestive systems. Police said they got a gunman to kill the witchdoctor by gunshots to the rear end because – if you think about it scientifically – that would surely break the spell, right? Last I heard the couple were facing the terrifying prospect of many years in a Thai jail, a thought I know will dramatically cure the husband's constipation. Stand well back!

Constipation is just one of many ailments with a mental element. I once told a colleague that his blood-shot eyes were "a sign of a twisted uterus" and he complained all day about how much his abdomen hurt.

All this talk of hypochondria reminds me we are overdue for an outbreak of koro. This disease appears in epidemic form every decade or so. It goes like this. 1) A guy imagines his genitals are smaller than he thought and tells friends they've shrunk. 2) The friends start to worry, which causes their genitals to shrink, too. 3) Repeat x 1000.

There have been many koro epidemics (Singapore in 1967, Thailand in the 1970s, Northeast India in the 1980s, West Africa in the 1990s and 2000s) but except for a small 2010 outbreak in south India, nothing recently. I may start an outbreak myself. Male readers: do you feel

your boxer shorts are more roomy than they used to be? Oh dear. That could be a bad sign.

The modern medical treatment for koro is education and reassurance, but I suspect the traditional Chinese remedy works better: healers bang a giant gong very loudly near the sufferer and tell him he's now fine.

In fact, the big gong thing could pretty much cure anyone of anything. I may try wheeling one into my local hospital and try it out. Stand well back!

Nury Vittachi is a Hong Kong-based author. Read his blog at Mrjam.org

“

There's a sign hanging from the ceiling at a hospital that reads: 'Beware of your head.' Wise advice

THE DIGEST

HEALTH

How to Increase Your Metabolism

Lose weight and feel less sluggish

A lagging metabolism can be a problem for many women. We asked Kristen Yarker, a registered dietitian, for her best advice.

DOES OUR METABOLISM SLOW DOWN WITH AGE?

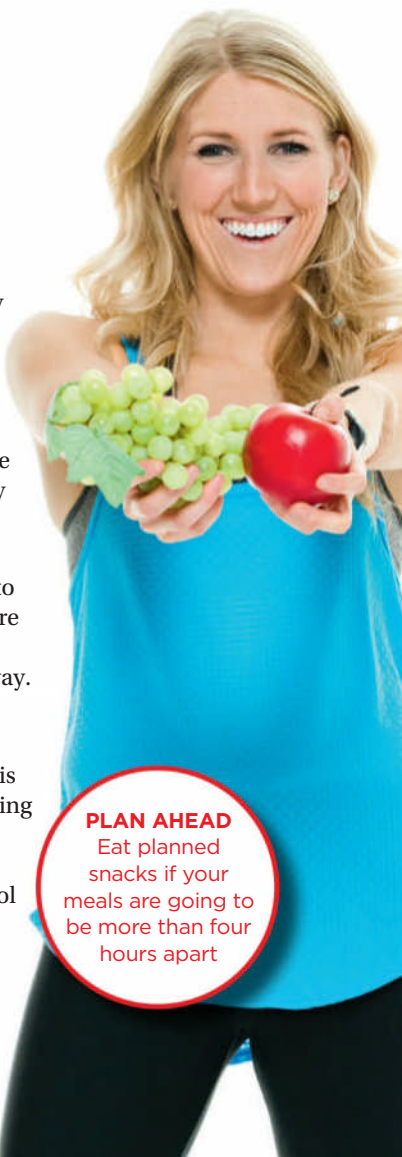
A slowing metabolism is part of the natural ageing process and we also have less muscle as we get older. Given that muscle is more metabolically active than fat, this becomes a significant factor.

SHOULD WE BE MINDFUL OF OUR CHANGING METABOLISM?

Out of habit, most of us continue to eat the same portions of food we did when we were younger, but we don't really need that much food any longer and we don't metabolise it the same way. The result is weight gain.

WHAT TIPS DO YOU HAVE TO INCREASE METABOLISM?

The best way to boost metabolism is to build, or maintain, your muscle mass. Weightlifting and high-intensity interval training seem to be particularly good at raising metabolic rate. Also, eating small, planned meals can be a successful tool for losing and maintaining weight. My go-to snack suggestion is a piece of fruit and a small handful of raw, unsalted nuts. Mix it up to get a variety of nutrients. For example, pair an apple with almonds or a pear with pumpkin seeds.



PLAN AHEAD

Eat planned snacks if your meals are going to be more than four hours apart

NEWS FROM THE World of Medicine

Yo-Yo Diets Pose Heart Risks

A study of 158,063 postmenopausal women found that repeatedly losing and regaining weight raised the risk of sudden cardiac death more than threefold among the subjects who started at a 'normal' weight (which usually means a body mass index between 18.5 and 24.9). Wild fluctuations in blood glucose, blood pressure and other cardiovascular factors might explain the added strain on the circulatory system.

Mental Health Can Affect Cancer Treatment

Clinically depressed patients may not respond as well to chemotherapy as non-depressed people do, and a Chinese study found a possible explanation. Depression sufferers had lower levels of a protein called brain-derived neurotrophic factor (BDNF) in their blood. Low levels make people less responsive to cancer drugs and less tolerant of their side-effects. With or without a depression medication,

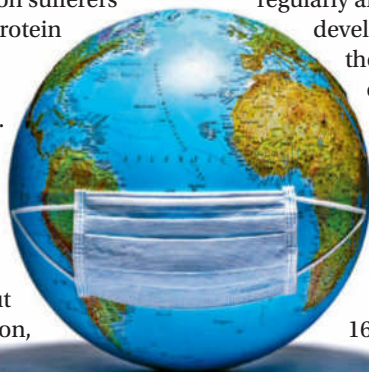
cancer patients are advised to look after their emotional wellbeing – for example, by seeing a counsellor.

New Drug Attacks Root Cause of Multiple Sclerosis

More than two million people worldwide have multiple sclerosis, a disease in which the immune system attacks the central nervous system, including the brain. In May this year the FDA approved ocrelizumab as the first medication for both relapsing and primary progressive forms of multiple sclerosis, the forms of the disease that most MS patients have at diagnosis.

Inactivity and Dementia Risk

Yet another reason to get off the couch: people who don't exercise regularly are twice as likely to develop Alzheimer's as those who exercise three or more times per week – the same dementia risk faced by carriers of the apolipoprotein E (APOE) e4 gene, according to a Canadian study of 1646 older adults.



A Cold Is a Cold Is a Cold. Or Is It?

BY SAMANTHA RIDEOUT

The common cold isn't usually serious, but it's still a pain, particularly when you can't seem to beat the bug

There may not be much you can do to make it go away sooner, but zinc-acetate lozenges (80 to 100 mg of elemental zinc per day for up to two weeks) and vitamin C (up to 8 g per day until you recover) are each worth a try, according to Dr Harri Hemilä of the University of Helsinki's Department of Public Health. They're low-cost, low-risk interventions that boast at least some evidence of shortening a cold's duration, if you take them when symptoms first appear.

In adults with normal immune systems, the common cold typically lasts around seven days. If you have symptoms for weeks on end, visit a GP to rule out another problem. You may actually have bronchitis or chronic sinusitis (inflammation of the sinuses), or be suffering from an allergy.

Sinusitis can drag on for 12 weeks or more and can include a runny nose, coughing, headaches and pressure or tenderness in the face. If bacteria are the issue, you may be able to eradicate



the cold with antibiotics; a nasal polyp can be surgically removed.

Another possible explanation for an overly lengthy cold: you caught a new bug just as the old one was clearing up. There are more than 200 constantly mutating viruses that can cause colds, so it's almost impossible to become immune to them all.

To protect yourself, wash your hands frequently. If you can remember, don't touch your eyes, mouth or nose, since these are three of the main places where the viruses enter the body.

PHOTO: ISTOCK

How to Talk to Someone with Hearing Loss

Crucial tips for supporting those with a hearing problem

People who have hearing loss may struggle with a surprising side effect: less satisfying relationships, as friends and family struggle to know how to communicate, says Katherine Bouton, author of *Shouting Won't*

Help. Clinically deaf, Bouton taught friends, family and colleagues how to help. Follow these simple tips so people with hearing loss will more easily understand what you're saying and be able to participate.

DON'T Shout Speak in a normal voice and articulate as clearly as possible; yelling doesn't help a person with hearing loss hear you any better. The exception: if your voice is particularly quiet, you should speak louder.

DON'T Lean in towards the ear Almost all people with hearing loss read lips. Don't speak directly into their ear because the person won't be able to see your lips.

DON'T Forget to eliminate white noise Most people with hearing loss have a hard time distinguishing speech over a noisy air conditioner, a humming fish tank or anything that whirs, murmurs or rumbles. Don't try to chat over the TV.

DON'T All talk at once At a dinner party or meeting, where there may be eight to ten people present, try to have one general conversation instead of several overlapping ones.

DON'T Say "Never mind, it doesn't matter" If someone doesn't hear what you've said after you've restated it two or three times, don't give up. Rephrase and retry. To the person who can't hear you, everything matters.



MALE OR
FEMALE?Make a croque
madame by
serving a fried
egg on top!

BREAD

Croque Monsieur

Versatile bread can be a key ingredient in a main course and dessert

Preparation 10 minutes

Cooking 13 minutes

Serves 2

2½ tablespoons butter

1 tablespoon plain flour

½ cup (125 ml) milk

*2 tablespoons grated
parmesan*

1 teaspoon Dijon mustard

4 slices sourdough bread

100 g sliced ham

2 slices Swiss cheese

PER SERVING

2242 kJ, 536 kcal, 25 g protein,
35 g fat (21 g saturated fat), 30 g
carbohydrate (5 g sugars), 2 g fibre,
1470 mg sodium

1 Melt 1½ tablespoons of the butter in a saucepan over medium heat. Stir in the flour to make a thick paste, then gradually add milk, stirring vigorously until smooth. Increase the heat to high and stir for another 30-60 seconds, or until it is thick and smooth. Stir in parmesan to make a cheese sauce. Set aside.

2 Preheat the grill to high. Spread the mustard over 2 bread slices, then top with ham and cheese. Top with the remaining bread to make 2 sandwiches.

3 Place a small frying pan over medium heat. Melt half the remaining butter in the hot pan. Fry one sandwich for 1 minute on each side, or until golden all over, then place on a baking tray. Repeat with the second sandwich.

4 Spread cheese sauce over the top of the sandwiches. Place under the grill for 4-5 minutes, or until the sauce is golden and bubbling. Serve hot.

Top Tip

Stale bread can be used in the bread and butter pudding recipe. Bread a day or two old will absorb moisture and still retain its shape. Fresh bread tends to lose its shape and texture when moistened.

TRY THIS!

Use a croissant instead of the bread. Or slices of panettone, the Italian sweet bread popular at Christmastime.



Almond or chocolate croissants will add to the buttery sweetness



Mini Bread and Butter Pudding

2 teaspoons butter

2 thick slices raisin toast

1 peach (fresh or canned), cut into thin wedges

$\frac{2}{3}$ cup (150 ml) milk

$\frac{2}{3}$ cup (150 ml) pouring cream

2 tablespoons caster sugar

$\frac{1}{2}$ teaspoon vanilla extract

2 eggs, lightly beaten

Icing sugar, for sprinkling

1 Preheat oven to 180°C. Butter the raisin toast on one side, then cut into 1–2 cm cubes and place in a $\frac{3}{2}$ cup (875 ml) baking dish with half the peach wedges.

2 Whisk the milk, cream, sugar, vanilla and eggs in a jug. Pour the mixture over the bread and arrange the remaining peach slices over the top. Leave to stand for 20 minutes, for the bread to absorb the milk.

3 Bake for 30–35 minutes, or until the top is golden and a skewer inserted in the centre comes out clean. Leave at room temperature for 10 minutes. Serve dusted with icing sugar.

Preparation

5 minutes
plus 20 minutes
standing

Cooking

35 minutes

Serves 2

PER SERVING

572 kJ, 137 kcal,
2 g protein, <1 g fat,
(0 g saturated fat),
31 g carbohydrate
(31 g sugars), 3 g
fibre, 16 mg sodium



Rockin' the Boat

BY GREG BARTON

Whatever your musical tastes, chances are there's a music-themed cruise to suit you. But what is it all about?

PLAY ON The phenomenon of specific music-themed cruises started in 2004 with the Jam Cruise. Still running today, this annual floating five-day music festival departs Miami, Florida, and features funk, rock and jazz bands – plus musical workshops and other entertaining distractions.

MUSICAL GENRES Music cruises fall into two categories: single-themed 'headliner' cruises that showcase a well-known band or musician accompanied by one or more support acts; and gigantic music festival-style cruises with dozens of acts, often from across different genres playing on multiple stages, floating platforms,

Fans aboard a music cruise rocking and rolling to the rhythms and the waves

poolside and anywhere else a set of speakers can be plugged in.

There is, quite literally, no musical genre that goes unrepresented, either. Rhythm and blues cruises, world music cruises, reggae, ska, bluegrass, pop, classical – whatever you are into, cruise companies will put a boat under it and push it out to sea. You can also set sail on a trip back in time on a '60s Flower Power cruise, a '70s Rock and Romance cruise, an '80s cruise guest hosted by Rick Springfield and endless others.

Theatre productions have also gotten in on the act, with Broadway Cruises becoming more popular, too. Exotic destinations include Cozumel, Jamaica and Grand Cayman. You

could find yourself on board with the stars from *Wicked*, *Beauty and the Beast*, *Les Misérables*, *Rent* and more. Then there's the Elvis tribute cruise, a genre unto itself, packed from port to starboard with hip-swivelling impersonators and featuring Elvis and Priscilla lookalike contests, Elvis trivia nights and even Elvis cooking shows.

BIG NAMES ON BIG BOATS If you're wondering why you haven't seen Status Quo, Def Leppard or Kenny Rogers doing the rounds of the music festivals lately, it's likely they're playing to fans on the high seas. Even megastars such as KISS have realised the potential of the cruising market, and have been appearing on sold-out KISS Kruises for the past seven years.

TAKING IT A LITTLE SLOWER If your tastes lean towards the more refined, you might consider a European river cruise, plying the waters of the Rhine and the Danube. Some operators ferry

passengers to and from the regions' classical music festivals, while others hold classical concerts aplenty on board, with the Saxon Organ Academy delighting passengers along the Rhine from Amsterdam to Strasbourg, and the London Festival Opera offering the same service along the Danube from Budapest to Vienna – the cradle of European classical music.

WHAT TO PACK For an Elvis Cruise, pack your blue suede shoes. For all others, you'll just need a sense of fun. Or, for the types of cruise where more energetic participation is called for – such as the flamenco, boot-scooting or ballroom dancing cruises – pack sturdy flamenco shoes, boots and ballroom attire, respectively.

Don't forget to stow a few items you might want autographed, too. Cruise guests have been known to come aboard with old guitars, artists' headshots and more in the hopes of snagging a celebrity signature.



Members of KISS rock happy-to-be captive fans (aka the KISS Navy) on the high seas

When You're Away, Pets Will Play

BY ELIZABETH HAMES

Pet owners may wish they could cuddle their furry companions all day, but someone's got to work to bring home the kibble. These tips should help keep your four-legged charges happy while they're alone.

LET THEM SWEAT Most cats and some dogs are happy to sleep all day, but puppies and some energetic breeds were born to run. Help your pooch burn off energy with a 30- to 60-minute walk before you leave.

CHAT THEM UP You can supervise your furry friend via an indoor security camera. You can also video chat over Skype (seriously!) by setting up an account for your pet, enabling the auto-answer feature and leaving your home computer on.

PLAY MIND GAMES Even a docile pet can gnaw out of boredom or separation anxiety. Put biscuits in a Kong or other feeding toy that a dog needs to

chew, bang or spin just the right way to access the treats. Indoor cats will enjoy toys that tap into their wild instincts, such as a noisy crinkle ball.

CONTAIN THE DAMAGE Nature calls for young dogs every half hour. To contain accidents, keep him or her in a small area, such as a laundry room, with access to food, water, toys and a corner covered with newspapers.

ROOM WITH A VIEW Place a perch where your dog or cat can look out the window. If you have an enclosed yard that is safe for your pet to roam, install a pet door so they can come and go as they please.

TRACK THEM GPS collars that text you if your pet leaves a designated safe zone are important for animals with outdoor access. Most also track activity, so you can tell how much exercise your dog gets during the day.



PHOTO: EVAN KAFKA

Conserve Your Mobile Data

Clever ways to reduce iPhone and android data usage

BY BROOKE NELSON

Avoid paying over-usage fees with these easy tricks.

LIMIT UPDATES Apps are thoughtful: they are constantly refreshing to give you the most recent information available. But that updating uses data, so if you don't need up-to-the-second weather reports or stock quotes, turn auto-refresh off for select apps.

IOS Go to Settings > General > Background App Refresh.

ANDROID* Go to Settings > Data Usage. Scroll down to the appropriate app and choose Restrict App Background Data.

ALWAYS SEARCH WITH WI-FI Your phone may automatically switch to using your mobile data when the Wi-Fi signal is weak – a handy feature, but not necessarily one you want to use all the time. You can stop your phone from making that switch.

IOS To disable, go to Settings > Cellular. Then turn off Wi-Fi Assist.

ANDROID* Unlike the iPhone, this setting is not turned on automatically. If the Wi-Fi signal is poor, you will be notified that you can turn it on. When you want to turn it off again, go to Settings > Wi-Fi > Advanced > Auto Network Switch/Smart Network Switch.



DISABLE DATA-SUCKING APPS

Another way to put your phone on a data diet is to turn off data for any apps you don't use often so they'll update only when you're connected to Wi-Fi. For streaming services such as Spotify, Netflix and Pandora, download the music or show while you're connected to Wi-Fi.

IOS Go to Settings > Cellular. Then under Use Cellular Data For, switch relevant apps to off.

ANDROID* Go to Settings > Data Usage. Scroll down to see apps sorted by how much data they use, and disable the ones that are high.

* Android phones' settings may vary. Check the manufacturer's website for specific instructions.

That's Outrageous!

OH BABY!

EARLY ADOPTER

They say you have to crawl before you can walk. Well, Zyla St. Onge learned how to water-ski before she could do either. Her father, professional barefoot water-skier Keith St. Onge, introduced her to the family business by pulling her across the carpet on a set of junior skis. She loved it, so he tested her on water. Zyla, then six months old, zipped across Lake Grew in Florida – at a kid-friendly 11 kilometres per hour – past loved ones who waded in, ready to catch her. After gliding for 210 metres, the infant let go, and Keith nabbed her within seconds. Zyla declined to comment (she can't talk yet), but Keith says she's onto her next challenge: crawling.

YOU SNOOZE, YOU LOSE

For the Sacramento Kings and Utah Jazz basketball teams, it was just another game. But for six babies, the halftime show was the competition of a lifetime. Pitted against one another at Sacramento's Sleep Train Arena, the



pint-sized athletes scurried several metres on their hands and knees, hoping to be crowned the fastest baby. It was soon a two-tot race, as four competitors failed to leave the starting gate. The leading pair was neck and neck until one crawler stopped unexpectedly at centre court – to nap. His rival took the lead and, ultimately, the glory.

UP IN THE AIR

On Mother's Day in 2015, Ada Guan and Wesley Branch were flying from Canada to Japan when Ada gave birth to a baby girl. Since airlines have firm policies about near-term expectant mothers flying, this is not something that happens too often. Except that Ada – in her 37th week – had no idea she was pregnant. She'd visited a doctor prior to going on holiday, and after putting on weight had even taken a pregnancy test, with negative results. Ably assisted by three doctors who happened to be on board, Baby Chloe was brought into the world over the Pacific Ocean, just an hour from Tokyo's Narita International Airport.

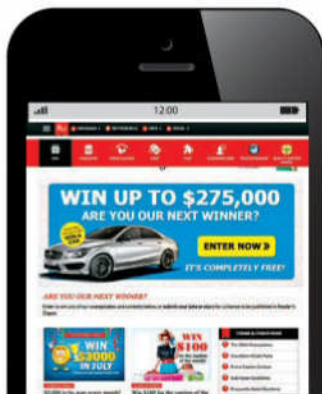
BY GRAEME BAYLISS; ILLUSTRATION: PIERRE LORANGER

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MARGARET WALKER



We help you get motivated

#QuotableQuotes and #PointstoPonder to get you through the day



Six Idiotic Idioms – and What’s Wrong with Them

BY BRANDON SPECKTOR



No Use Crying Over Spilt Milk

THE FLAW Crying can help people recover from disappointment. True, it's dangerous to dwell on the past, but holding back those spilled-milk tears could hurt even more. A survey of more than 5000 weepers in the *Journal of Social and Clinical Psychology* suggests that a good cry can provide resolution after pain – respondents who tried to suppress their sobs only felt worse. Or, to put it in more lactose-tolerant terms, “Sometimes we *should* cry over spilled milk,” writes Aaron Ben-Ze’ev, a philosophy professor at the University of Haifa in Israel. “Otherwise, how will we learn to value milk, and how will we avoid spilling it again?”

Pure As the Driven Snow

THE FLAW Driven snow is toxic. ‘Driven’ snow has been blown into drifts and remained untrodden-upon by human heels. Sounds pure, but according to Canadian researchers, fresh white snow is a magnet for car-exhaust pollution, absorbing enough toxins while ‘driven’ to become a health hazard if you were to drink enough of it.

You Catch More Flies with Honey than with Vinegar

THE FLAW Vinegar is a fly magnet. If you’ve ever endured a fruit fly invasion in your home, a bowl of vinegar was likely your first line of defence. Researchers from Northwestern

University found that “adult flies forage for microbes on overripe fruit, relying on their sense of smell to detect the acetic acid – the chemical that gives vinegar its pungent aroma – that accumulates as the fruit ferments.” The hungrier a fly gets, the quicker it succumbs to vinegar’s dubious charms.

Low Man on the Totem Pole

THE FLAW The low man is often the most admired. Vertical order on totem poles rarely denotes importance. One thing the ‘low man’ almost always earns, though, is love from the carver and hence the viewer. “Most carvers begin from the bottom of the pole, moving to the top,” writes Pat Kramer, author of *Totem Poles*. “Bottom figures are detailed because observers see these figures close up.”

Money Can’t Buy Happiness

THE FLAW Yes, it can. Permanent happiness is fleeting no matter what your bank account looks like, but research shows that money does, in fact,

give you short-term bursts of joy – if you spend wisely. Experiences such as concerts or holidays have been shown to bring greater happiness than purchasing stuff. People who spend money on others are also measurably happier than those who treat themselves. So do yourself a favour: buy happiness for someone else.

Pick the Low-Hanging Fruit First

THE FLAW Lower fruit is often the last to ripen. “Fruit that is high up, exposed to the sun, ripens the fastest,” says Gennaro Fazio, a plant breeder and geneticist for the USDA’s Agricultural Resource Service. “You want to pick the low-hanging fruit last, so it has more time to develop.” What’s more, starting at the top makes the job easier, says apple-picking veteran Henry Rueda. When pickers harvest from top to bottom, the sacks of fruit they carry around their necks and shoulders grow heavier as they move downwards, working with gravity, not against it. **R**



WHAT’S IT WORTH? AWARDS EDITION

A bird enthusiast paid £7000 for a medal of bravery awarded to Paddy the Pigeon, the first bird to return news of the D-Day landing to the UK, and part of the National Pigeon Service. As radio signals could compromise operations, carrier pigeons were used to carry important messages back to Britain. Paddy’s flight time was five hours, but first he had to make it past the hawks the Germans stationed at Calais to intercept Allied pigeons. SOURCE: BBC



AGAINST THE ODDS

At six months, Alexander rarely smiled or moved on his own. With little known about his syndrome, his parents charted their own course

BY CHRIS TURNER

PHOTOGRAPHED BY NOAH FALLIS

FOR THE FIRST SIX MONTHS of Alexander's life, I wanted to believe he might get well on his own. I would often lie down on the floor and make faces at him, trying to tease out a smile. Sometimes, after lots of effort, it worked. But mostly, my son was motionless and silent, his eyes focused on nothing in particular.



The author and his son, Alexander, who has been diagnosed with the extremely rare Kleefstra syndrome

It was the autumn of 2009 and my wife, Ashley, and I had only just moved into a new home in Calgary, Canada. We had a vivacious four-year-old daughter named Sloane, a grouchy Siamese cat and an infant son who was a mystery. Alexander had been born hypotonic – floppy, basically – with an abdominal hernia, a heart murmur, strange folds on his ears and a V-shaped birthmark in the centre of his forehead. The geneticist assigned to us in intensive care, Micheil Innes, knew these were markers of a genetic disorder, but he couldn't place it.

Even after Alexander was healthy enough to come home, he remained undersized and underweight, hardly able to hold up his head. Amid the blurry rush of feeding and nappies and getting Sloane off to school, I could pretend he was just a little quiet and weak for his age. But the truth is, we often wondered if there was any awareness inside him at all.

The first tentative answer arrived on a dark afternoon in December. We were called to a small room at the Alberta Children's Hospital where Innes explained that a piece of our

son's genetic coding simply wasn't there. He showed us the lab results: rows of striped squiggles like some ancient alphabet, and a red dot indicating the location of the missing material – near the end of the 'q' branch of the ninth pair of chromosomes. The precise spot, in technical terms, was 9q34.3.

Innes then handed us a pamphlet that had been printed off a website. The document explained that '9q34.3 subtelomeric deletion syndrome' was usually an uninherited, spontaneous mutation, likely occurring at conception. The condition was later renamed Kleefstra syndrome, after a Dutch researcher who studies it. Innes believed there were fewer than 100 verified diagnoses worldwide at the time. Alexander's developmental problems were born of a single cause – the tiniest of wounds, duplicated in every single cell in his body, forever. Because there were so few cases, the pamphlet provided anecdotes rather than a prognosis: a series of expected obstacles – to speech, mobility, learning – that our son might overcome, if lucky, after a lifetime of hard work.

Ashley and I drove home from the hospital in devastated silence, as



WE WERE TERRIFIED OUR MUTE CHILD
WOULD NEVER WALK OR TALK, LET
ALONE RUN ACROSS A PLAYGROUND



Alexander with his mother, Ashley Bristowe, in late 2014

if some vital swatch of our family's fabric had been ripped away. Later, as I watched Alexander in bed, I was too numb even to cry. I started to indulge in wishful thinking. *Maybe he'll simply catch up to his peers*, I thought to myself. *Maybe someone will figure out how to fix this*. I was convinced, in any case, that I couldn't.

A few days after meeting the geneticist, we were having dinner when Sloane jumped from her seat and skipped to her brother in his high chair at the other end of the table. We hadn't discussed Alexander's diagnosis with her, but Sloane's internal radar for her parents' moods had always been impeccable, and

we were both far too shaken to hide it very well. My wife, usually a boisterous, no-holds-barred play fighter, had already put the rough-housing on hold as the house filled with a formless, boundless anxiety.

Sloane set herself up behind Alexander, hands clutching either side of his chair, and started flinging herself from one side of his head to the other. With each swing, she bellowed giddily, "Hello, Mr Chubby Cheeks!" Alexander began to swing his head back and forth in time with her. His face erupted in a gap-mouthed grin. And then, for the first time in his life, Alexander laughed. Hard. A sudden, gurgling, exuberant laugh. And then we all did.

Somewhere on the other side of the diagnosis was a boy who could feel joy. It was our job to find him.

We began where almost all parents with a special-needs child begin: monthly visits to an overworked early-intervention clinic that recommended rudimentary physical therapy – exercises to encourage rolling over and sitting up, for example. The workouts seemed arbitrary and totally out of proportion to Alexander's needs, like Band-Aids on broken limbs.

My wife pushed the therapists at the early-intervention clinic for better ways to address Alexander's disorder. The medical professionals were invariably kind and competent, but Kleefstra syndrome was a question mark for them, too. The message was to wait and see, to react once Alexander's symptoms were clearer. Had we acquiesced, the 'intensive' part of my son's therapy would've started around the age of three, at the earliest.

Ashley has never accepted the default position on anything, and when it came to her gnawing fear of her son's diminished prospects, she was relentless. She used her background as a research editor and radio producer to dig deeper. Books on disability and the brain piled up on her bedside table. One of those titles, recommended by a friend, was Glenn Doman's *What to Do About Your Brain-Injured Child*. Doman – who died in 2013, at 93 – was the founder of The Institutes for the Achievement of Human Potential, an

unconventional teaching institute in Philadelphia. Using its methods, neurologically impaired kids learn not only to walk and talk but read and count – often well ahead of unimpaired peers. Ashley had been begging me to look at Alexander's condition as a crisis that – though it could never be fully eradicated – could still be treated. Here, finally, was corroborating evidence.

As a physical therapist in the 1940s, Doman was frustrated by the high failure rate of the techniques being used on stroke victims and, later, disabled children. Through trial and error, he and his clinic developed a new approach, founded on the theory – today called neuroplasticity – that the brain can grow and change through use. Doman's clinic amassed evidence, case by case, that with enough hard work, kids like Alexander often exceeded every limitation that had been placed on them.

Following specifications in a book by Doman's son, Douglas, my father and I built a 'crawling track' in our living room. It was a simple ramp with low sides made of heavy plywood, like a jungle-gym slide, wrapped in padding and turquoise vinyl. Following the instructions, we propped the track at an incline steep enough that Alexander's slightest wiggle would result in movement.

Then, against any number of parental instincts, we placed my son at the top. He was seven months old and had never wilfully moved an

inch in his life. He howled in protest, squirmed in defiance – and the motion sent him skidding down the track.

Within a week, he was propelling himself skilfully, angry at first but eventually with resolve and even joy. We reduced the incline as he improved, until it was lying flat. A few months later, he crawled right off the end of it. And then he kept right on going.

We signed up for the next available introductory session at Doman's

engagement – daily crawling distance targets, reading and maths exercises, workouts aimed at improving breathing and coordination, all of it done by parents themselves. As Rosalind told us at the time, "There are lots of reasonable programmes out there. Trouble is, they don't work very well."

When we returned home the next week, we reorganised the main floor of our house around Alexander's therapy. We filled our living room



ALEXANDER'S DAILY THERAPY, INCLUDING EXERCISE, DIET AND LEARNING TOOLS, NOW LOOKED LIKE AN OLYMPIC ATHLETE'S

clinic, now directed by his daughter-in-law, Rosalind Doman. Alexander was to be the first diagnosed Kleefstra kid the clinic would ever treat.

In Philadelphia the following April, when Alexander was just 11 months old, we found ourselves surrounded by three dozen parents who had come from as far away as Belarus, Singapore and India. In a week of all-day lectures, our expectations for Alexander – and of our role in his therapy – turned upside down. The clinic's programme was wildly ambitious and nearly impossible to implement fully. It involved almost constant, regimented stimulation, physical activity and intellectual

with mats and flash cards emblazoned with words and dots for counting. As part of Alexander's physical therapy, we installed an elaborate 'monkey bar' ladder apparatus. (Learning to walk while alternating hands on the rungs helped train Alexander's brain in 'cross-pattern' movement, and the raised arms encouraged good posture.) Our son's diet was stripped of known allergens and inflammatories to eliminate any possible nutritional impediments to his development. His daily regimen looked like something prescribed to an Olympic athlete.

The standard approach for a developmentally delayed person is nowhere near this ambitious. But we didn't want

to wait until after our child's malleable brain had stiffened into adulthood. Ashley and I now had the tools to make the most of Alexander's crucial early years. We intended to use them all.

Ashley threw herself into running Alexander's therapy programme full-time, and my daily routine as a work-from-home freelancer soon involved at least as much duty as a therapy assistant. The stress was

volunteer helpers, which meant most of our neighbourhood block knew all about his condition. The spring after he turned three, when he started to walk up and down the street on his own, his first trips were victory laps to cheering neighbours.

We would have to wait another year for proof that the reading and maths exercises were sinking in. Day in and day out, we dutifully held up flash



ALEXANDER HAS PROVEN THAT MANY OF THE LIMITS WE THOUGHT COULD NOT BE OVERCOME FALL AWAY WITH HARD WORK

enormous, and our debt grew whenever we sacrificed more work time for Alexander's sessions. For my wife, the manager of our ersatz team, administering the multiple programmes meant constructing a self-made cage. Our professional lives had involved extended research trips, and now whole weeks could pass without either of us leaving the house except to ferry our daughter to and from school.

Still, we agreed that the strain on our family was better by far than the despair of not knowing what to do. We believed, most of the time, that there was a smart little boy straining to emerge from those flapping, disorganised limbs. Alexander's programme required a platoon of

cards containing words and numbers, sentences and equations. But how could we know for sure how much of it was working when Alexander could only speak in fragments and monosyllables? Incontrovertible evidence came one day when we were in the car, about to pull out of a parking lot. Ashley was listing off rhyming words for Alexander to attempt to repeat. "Car," she recited. Alexander repeated it. Then they ran through "far," "bar," "star."

Ashley paused, thinking the game was over. From the back seat, a thin, cheerful voice: "Guitar!" An unprompted, two-syllable rhyme. Our explosive cheer was so loud it startled Alexander almost to tears. The kid could talk – and rhyme! Every

agonising day of his therapy had been worth it for that marvellous rhyme.

Alexander recently turned seven, and we no longer have reason to doubt his ability to learn. His daily life is an inventory of things he wasn't expected to do – possibly ever, certainly not by now. He can tell you his name and address. He'll ask you to draw a cement truck on his whiteboard, then spell the letters with glee as you write them out.

Last autumn, just a year behind schedule, Alexander started kindergarten in a standard classroom. At the supermarket, he counts off the aisles from the signs overhead, calling, "Aisle 5!" with particular delight. Then we stand in beloved Aisle 5 to wait for the automated checkout machines. "Comm-poo-ter!" Alexander announces as I sweep our groceries over the sensor, raising his arms in excitement. Gazing out from beneath a tussle of golden hair, his deep brown eyes are magnetic – they never fail to tease a smile from the checkout attendant.

Whatever Alexander's limitations

are, he is nowhere near them yet. He might never be completely self-sufficient. But I believe, if he winds up anywhere near such a state, it will be because, against the advice of many experts, we maximised every moment during his early years when his brain was at its most able to reorganise itself to compensate for that tiny missing sliver of gene in every cell. I want Alexander to be seen as a model of how early intervention should be done: all day, every day, as much as a distressed family can possibly cram in, from the moment anyone suspects anything is wrong.

This, I hope, is Alexander's lesson for all of us. We've only just left the dark ages when it comes to our understanding of how the human brain works. The potential waiting there is an enormous untapped resource. And as Alexander has proven already, many of the limits we long believed were impossible to overcome fall away quickly in the face of the right kind of hard work. **R**



SNAKES ON A LEASH

When we're out and about with our pets, most owners know they need to have their furry friends wear a leash. But what about animals you wouldn't think to put a leash on? A South Dakota man is now challenging Sioux Falls authorities after receiving nearly \$200 in municipal fines for allowing his pet snakes to roam freely about a park. Jerry Kimball calls his slithery friends "misunderstood" and often takes a few of his nine snakes out in public to interact with bystanders. WWW.KDLT.COM



COVER STORY

Meet the Australian wildlife warriors winning the slow and steady race against turtle extinction



The Turtles *of* Wreck Rock Beach

BY DAVID LEVELL

A large loggerhead turtle is the central focus, swimming towards the viewer. Its head is turned slightly to the left, showing its characteristic large, dark eye and patterned scutes. The turtle's carapace is a mix of olive green and brown, with distinct scutes. Its flippers are extended, showing the intricate patterns on the skin. The background is a deep blue ocean with many small, dark fish swimming in the distance. The foreground is filled with a diverse and colorful coral reef, with various shapes and textures of coral visible.

*Global citizens:
loggerhead
turtles roam vast
ocean regions
and call the
beaches of several
countries home*

WRECK ROCK BEACH is a long way from anywhere, but for hundreds of endangered sea turtles – and veteran turtle monitors Nev and Bev McLachlan – the lonely stretch of southern Great Barrier Reef sand is home away from home. Fringing the dense coastal scrub of Deepwater National Park 100 kilometres north of Bundaberg, this remote spot is at the forefront of the fight to secure South Pacific sea turtles a future.

“We’ve been coming here every summer since 1977,” says Nev McLachlan, relaxing with wife Bev in their bush camp. That doesn’t mean they take it easy. Sleep and turtle patrol are not bedfellows. Every night – often all night – during their annual eight-week vigil, the Sunshine Coast couple bounce along 22 km of starlit beach on quad bikes, looking for the loggerhead and green turtles that arrive on night tides to lay their eggs.

The first sign is usually tyre-like flipper tracks between the shoreline and tussocked dunes. In the dark, the evening’s first loggerhead looks at first like

another sand dune or beach rock, albeit one with a reptilian tail and massive, craggy parrot-like beak. Flippers jerking and breath hissing, she hollows out a sandy depression (called ‘body-pitting’), then digs a hole (‘egg-chambering’) to lay 100 or so leathery, ping pong ball-sized eggs.

With expert ease, Nev notes the numbered metal tag on a foreflipper, and measures the shell length: 99.1 cm, a little above average. Nesting time and place, species and other particulars are also recorded and sent on to a centralised database.

Despite their far-flung location, Nev and Bev don’t work in isolation. They’re part of a long-term grassroots movement recording turtle activity at more than a dozen beaches along the Queensland coast and offshore islands. “I love going out and seeing the turtles and tagging and monitoring them,” Bev says. “But I now get probably more enjoyment out of looking at the databases.”

Data from volunteers such as the McLachlans and the scientists they assist, patiently amassed over many years, has proved vital for discovery





Every year, Bev and Nev McLachlan live in a caravan for the eight-week turtle-monitoring season

and conservation. It established the now-famous fact that turtles return to nest at or near their birthplace. Queensland-collected data also revealed the temperature-dependence of turtle gender (warmer nests make mostly females), and the surprisingly advanced age at which turtles start to reproduce – about 30 years for loggerheads, and up to 45 years for greens.

Behind all these discoveries is Dr Col Limpus, Australia's pre-eminent turtle expert, who has dedicated

his life to their study and protection. The nerve centre of his operations is Mon Repos Beach near Bundaberg, the biggest loggerhead rookery in the southern hemisphere. Mon Repos hosts half the South Pacific's nesting loggerheads – and since 1968, the world's longest continuous turtle research programme.

In that time, Limpus has overseen the transformation of a site threatened by property development, predation by feral animals and with an 86 per cent decline in the turtle population into a viable, fully protected habitat and ecotourist attraction. Between November and March the Mon Repos rangers escort visitors on night tours to watch turtles nesting or hatching. Sometimes it's hands-on – eggs laid in error

below the high-tide mark will see the hatchlings drown, so they're dug up and relocated with tourist help.

The will – and ability – to better protect turtles has grown as more about them becomes known. When Nev and Bev first came to Wreck Rock there was no national park. Foxes ran rampant, eating most of the eggs. Off-shore, pregnant turtles were drowning in trawl nets. But by 2004, 30 years of data from Nev and Bev proved the beach was a critical turtle habitat and

directly contributed to the waters off Wreck Rock being incorporated into the Great Barrier Reef Marine Park.

Several reforms have improved the outlook for turtles, although serious concerns remain. Baiting has now cut fox predation by up to 95 per cent, but

goanna predation is a big problem. An education campaign teaches people living near nesting beaches to ‘cut the glow to help turtles go’ – that is, reduce outside lighting, which spooks laying mothers and hinders hatchlings from using the natural glow of the horizon to deter-

mine the direction of the water. Turtle excluder devices (TEDs) on trawl nets, compulsory since 2000, have meant 99 per cent less turtle bycatch on Queensland prawn trawlers. Loggerheads, with their crustacean diet, were especially vulnerable.

“Immediately there was a 30 per cent increase in nesting turtles,” Nev says of the TEDs. “They were being saved from drowning in trawl nets between nestings. But it wasn’t increasing the amount of new turtles. That’s still the big worry now.”

A Numbers Game

Identifying first-time nesters is simple: after five decades of tagging everything with flippers and a shell, they’re the ones without tags. But where are

they? “They’re not returning to the area,” says Limpus. “So the older ones that die off aren’t being replaced.” At current rates, by 2020 there may be no new breeding loggerheads to replace their elders (the years between nestings increase as a turtle

ages, although when they stop breeding altogether is still unknown).

Bev fears this is a legacy of the 1970s and ’80s, when nest mortality was extreme. “If they take 30 years to breed, did we have so much predation back then that not enough got to the water?”

Many thousands more hatchlings survive Queensland’s beaches these days, so first-returns might pick up when these more abundant generations mature. But turtles spend decades at sea before their first nesting, and their troubles out there are increasing.

By 2009, genetic sampling had confirmed Queensland-tagged turtles venture as far as South America in their first 15 years – these are the virtually unknown ‘lost years’ between when they hatch and return, almost fully grown, to Australian coastal feeding grounds.

It was troubling news. Peru and Chile have the world’s second- and fifth-biggest fisheries, and the European Union fleet now fishes those waters, too. “With 10,000 boats, even

“
Turtles spend decades at sea before their first nesting, and their troubles out there are increasing



Left: Nev checks a nesting loggerhead's tag; Stephen Menzies watches over Nemo, a green turtle, at the Reef HQ Turtle Hospital in Townsville

incidental catches of one or two turtles each is a problem," says Nev.

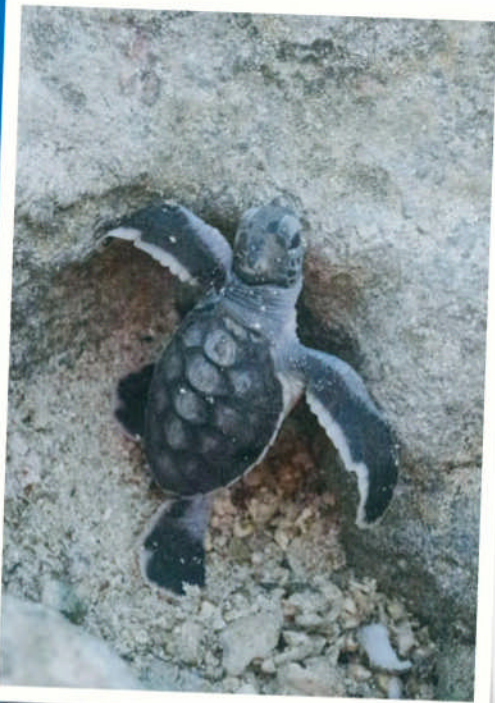
Limpus goes further: "A hundred thousand loggerhead turtles are caught every year as fishing bycatch. A lot survive, but with hooks down their throats."

A Helping Hand

Another danger is floating plastic, which turtles apparently mistake for edible jellyfish. More than 50 per cent

of turtles worldwide are thought to have ingested plastic, which can kill by blockage, or sicken with leached chemicals. Then there are the multiple water-quality issues that affect seagrass growth, and possibly increase tumours and infections.

In Townsville, the Reef HQ Great Barrier Reef Aquarium has responded with a turtle hospital, where sick or injured turtles are given a chance to recover. More than 200 have been



Six of the world's seven species of marine turtle are found in Australian waters. For all seven species, surviving the many threats to their survival is a struggle

treated since 2008, but just two are in care today – a far cry from 2011, when 35 starved green turtles crowded the hospital to capacity after Cyclone Yasi devastated seagrass beds. One patient is a healthy juvenile green, a former research subject being monitored for release, but the other has “done the trifecta,” says manager Stephen Menzies, with a missing flipper (the result of fishing line entanglement), a swallowed hook and a badly cracked shell from a shark or crocodile bite.

Often it's a waiting game – weight-size ratio, appetite, gut function and wound-healing are tracked until a turtle is fit for release. “We bring the water up to about 28°C to get the metabolism going,” says Menzies. “We reduce salinity to assist with rehydration, often a problem with malnourished animals. All the turtles we euthanise or that die are given a post-mortem – we learn more from them than ones we release. Sometimes we don't know what's wrong with them, but they recover.”

PHOTOS: (LEFT) ISTOCKPHOTO; (RIGHT) DAVID LEVELL

Assessing turtle health is tricky, because there's little comparative data to measure it against. Seeking answers, James Cook University opened its Turtle Health Research Facility in Townsville last year, a world first. "We get a lot of sick turtles, but we don't yet have a clear description of what a healthy turtle is," says the facility's Karina Jones.

Opportunity knocked during field research on Heron Island, a key Great Barrier Reef rookery, when 41 green hatchlings made the normally fatal error of emerging in daylight. "They were being completely swarmed by sea gulls," says Karina. "It was pure carnage, but we scooped them up and now they live here with us."

Now safely lodged in numbered tubs, the tiny turtles enjoy twice-weekly shell scrubs with toothbrushes. Over time, their biometric data will build an accurate profile

of turtle health. In any event, they'll be easier to keep safe than their wild cousins, riding the cross-Pacific currents towards thousands of fishing boats and plastic bags.

Limpus, as Australia's 'turtle ambassador,' is heading an international

action programme for loggerheads, aimed at unifying the conservation efforts of nine countries, including Chile, Peru, Ecuador and Australia. Despite slow progress, he remains optimistic. "When I started, green turtles were at a very low level," he says. "During my

"When I started, green turtles were at a very low level ... The population has tripled. So we can turn it around"

time the population of green turtles has tripled. So we can turn it around."

Driven by the same ancient instinct that saw their ancestral mothers heave ashore to nest back in dinosaur days, turtles seem incapable of giving up. And so, thankfully, are those working tirelessly to ensure this precious, prehistoric cycle of life continues into the ages ahead. **R**

WHAT'S IT WORTH: AWARDS EDITION

Steven Spielberg has spent more than \$1.3 million buying vintage Oscars at auction (including Bette Davis' Best Actress statuette for *Jezebel*), then donating them back to the Academy of Motion Picture Arts and Sciences.

SOURCE: LA TIMES

3 Mind-Blowing Movie Theories

Forget what you thought you knew about your favourite films

BY JAMES JACKSON

NOTHING BEATS THE THRILL of watching a brilliant movie for the first time. But you can come close to recapturing that magic if you're willing to watch that familiar film from a different perspective.

Many movies leave unanswered questions – and the occasional gaping plot hole – and it's up to the audience to fill in the blanks. Often, the movie theories that fans come up with to explain a weak plot point or curious bit of character development are more imaginative than the filmmakers themselves claim to have intended. Nevertheless, these theories are based on hints – however subtle – that keen audiences have picked up on, viewing after viewing.

Check out these mind-blowing movie theories, and get ready to re-watch your favourite flicks with fresh eyes.

1 'James Bond' is actually a code name

Fans of the *James Bond* film franchise may have noticed that even as the decades pass and the technology changes, Bond himself is forever young and ready for action. Some have attributed this to the production teams updating



the character to keep him relevant, while others have a more cunning explanation. Have you ever considered that 'James Bond' is merely a code name for various 007 agents? This would certainly explain why the man never seems to age, and why he isn't shy about introducing himself with the iconic "Bond ... James Bond" in the presence of potential foes.

2 Jar Jar Binks is a Sith Lord

Jar Jar Binks is probably the most hated character of the *Star Wars* prequels, and this theory gives us a reason to hate him even more.

Some have suggested the gullible, dim-witted and clumsy character is in fact an evil Sith Lord, pulling the strings in the background to help Senator Palpatine become emperor.

Where's the proof, you ask? Well, his prowess on the battlefield and ability to escape *Episode 1: The Phantom Menace* unscathed is one piece of evidence. More insidiously, however, is the fact that in many scenes, Jar Jar appears to be mouthing the words other characters are saying and using subtle hand gestures – suggesting he may be using the Force to manipulate those around him. What's more, Jar Jar is also the one who urges the senate to give Palpatine supreme power later on in the series.

Still not convinced? You might recall Yoda is portrayed as an old, naïve and somewhat silly character when he's first introduced in *The Empire Strikes*



Jar Jar Binks: idiot or super villain?

Back, but we quickly learn that despite appearances, he's a wise and powerful Jedi knight ...

3 *The Hunger Games* takes place in a parallel universe

Reddit user TheMartianManhunter developed a theory that argues that the popular book and film series takes place in an alternative universe where Britain won the American Revolutionary War of 1775-1783. According to this version of history, Britain defeated the Americans and struck fear into the hearts of the 13 colonies by destroying one – District 13. To continue demoralising the remaining colonies, the British developed the Hunger Games. They also established the Capitol and installed a ruthless governor (President Snow) to oversee the colonies.

What do you think?

R

Life's Like That

SEEING THE FUNNY SIDE

JULY
1949

From the Archives

Every so often the RD archives produces an anecdote more astonishing than outright hilarious. This 68-year-old letter from July 1949 is certainly one of those ...

In the nearly empty New York bus, a survivor of Dachau was struggling with the words of a song in a booklet entitled *How to Become a US Citizen*, but it was painfully evident that he was hopelessly off the track. After listening a few moments, a man in a nearby seat moved over, took the booklet and quietly began to demonstrate how the song should be sung.

The bus driver looked back, smiled, and then both he and I joined in with a good, round, "Oh, say, can you see ..."

By the time we got to 64th Street, our pupil's singing had improved noticeably. Of course, he had good teachers – the bus driver, myself and Bing Crosby.

SUBMITTED BY JOHN O'KEEFE



NOTE TO SELF

When I returned home from university for the holidays, I noticed a note on the refrigerator door. It listed some goals my dad had set for himself: help wife more; lose weight; be more productive at work. I promptly added: 'Send Michelle money every month'.

A few days later, my

brother wrote: 'Make payments on car for Jason'. My boyfriend joined in with: 'Buy Tom a Jeep'. Finally, my father added a new goal to his amended list: 'Wean kids'. Seen online

DON'T MESS WITH MUM

My 14-year-old son made fun of me this morning because I had to go to work while he had a day off from school. So I changed the Wi-Fi password.

Source: boredpanda.com



My therapist and I got stuck in the same elevator and pretended we didn't know each other. Next week's session writes itself.



@APARNAPKIN

(comedian Aparna Nancherla) on Twitter

READ BETWEEN THE LINES

My grandson Jesse and granddaughter Kennedy stayed the night at my house. The following morning I was putting vitamin C cream on my face. Kennedy was watching me and wanted to know what it was. I knew she'd want to try it, so I said, "It's a cream to stop wrinkles."

Dead serious, she replied, "It's not working."

SUBMITTED BY SHARON HART



MODERN MATRIMONY

I realised that my five-year-old grandson had been watching too much reality TV the day we attended a relative's wedding.

As the four bridesmaids walked down the aisle towards the front of the church, he leaned in and asked, "Is this where the groom decides which one he wants to marry?"

Source: gcfl.net



The Great Tweet-off: Confession Edition

Doesn't it feel good to get something off your chest? Do it on Twitter and the feeling can be shared by millions ...

Told my son that his bellybutton was a reset button; if he was behaving rudely, I'd push it so he'd have to start as a baby again.

@SDEBS27

Got embarrassed that I used the elevator to go down one level so I limped out to not look lazy.

@FRECKLEDNOMAD

At the bar when I was ready to leave I'd get up and say, "I'll buy this round." I'd leave the table and never come back. @JAMIECWP

I told people I tore my rotator cuff rock climbing. I really tore it scooping ice cream that was too hard.

@FLABERGATED

When we first started dating, I convinced my wife that I had donated one of my kidneys to my grandma. @MATTPYTON

Sometimes when I order Chinese food I'll muffle the phone and say, "One sec ... what did you want?" and order myself a second dish.

@DINOFACE1





ADVENTURE

He wanted an exciting holiday.
Thanks to his confused GPS, he got one

WHERE ON EARTH AM I?

BY DAVID KUSHNER FROM *OUTSIDE*

BEFORE NOEL SANTILLAN became famous for getting lost in Iceland, he was just another guy looking for adventure, armed with the modern traveller's two essentials: a dream and, more important, a GPS unit.



On a frigid, pitch-black February morning in 2016, the 28-year-old marketing manager from New Jersey was driving away from Keflavík International Airport in Iceland in a rented Nissan hatchback towards a hotel in Reykjavík, about 40 minutes away. He was excited that his one-week journey was beginning but groggy from the five-hour night-time flight. As a pink sun rose over the ocean and illuminated the snow-covered lava rocks along the shore, Santillan dutifully followed the commands of the GPS that came with the car, a calm female voice directing him to an address on Laugarvegur Road – a left here, a right there.

But after stopping on a desolate gravel road next to a sign for a petrol station, Santillan got the feeling that the voice might be steering him wrong. He'd already been driving for nearly an hour, yet the ETA on the GPS put his arrival time at around 5.20pm, eight hours later. He re-entered his destination and got the same result. Though he sensed that something was off, he decided to trust the machine.

The further he drove, the fewer cars he saw. The roads became icier. Sleeplessness fogged his brain, and his empty stomach churned. The only stations he could find on the radio were airing strange talk shows in

Icelandic. He hadn't set up his phone for international use, so that was no help. At around 2pm, as his tyres skidded along a narrow mountain road that skirted a steep cliff, he knew that the device had failed him.

He was lost and – despite the insistence of his GPS – nowhere near

his hotel. There were no other drivers on the road, and there was little else to do but follow the line on the screen to its mysterious end. "I knew I was going to get somewhere," he says. "I didn't know where else to go."

The directions ended at a small blue

house in a tiny town. A pretty blue-eyed blonde woman answered his knock. She smiled as he stammered about his hotel and handed her his reservation.

No, she told him, this wasn't his hotel, and he wasn't in Reykjavík. That city was 362 kilometres south. He was in Siglufjörður, a fishing village of 1300 people on the northern coast. The woman, whose name happened to be Sirry – pronounced just like the Apple bot that offers users directions through life – quickly worked out what had happened.

The address on Expedia (and his reservation printout) was wrong. The hotel was on Laugavegur, but Expedia

**Santillan
sensed
something
was off
but decided
to trust
the machine**

had accidentally spelled the street name with an extra 'r' – Laugarvegur.

Santillan checked in to a local hotel to get a good night's sleep, with the plan of driving to Reykjavík the next day. When he told his story to the woman at the front desk, she chuckled. "I'm sorry. I shouldn't laugh at this," she said, "but it's funny."

The next morning, when he went to check out, the joke became even grander. "Some reporters want to talk with you," said the hotel receptionist.

Sirry had posted his absurd story on her Facebook page, and it had quickly been shared around. A Facebook friend of hers, the editor of an Icelandic travel site, wrote a blog post on the "extraordinary and funny incident". Soon his misadventure had attracted the interest of TV and radio journalists.

They weren't the only ones who wanted to talk with Santillan. "Everybody in the town knew about me," he says. Some Siglufjörðhurians came to the hotel to welcome him and take pictures. One offered him a tour of the village's pride and joy, the Icelandic Herring Era Museum. The chef at



A few errant turns led Noel Santillan on a 362-km detour that made him a minor Icelandic celebrity. On the plus side, he's posing here with a new fan

Santillan's hotel prepared the local beef stew for him, on the house.

Enjoying all the hospitality, Santillan decided to spend an extra night. The following day, he went on TV, explaining to a reporter that he'd always found GPS to be so reliable in the past. By the time he made it to Reykjavík that evening, he had become a full-blown sensation in the national media, which dubbed him the Lost Tourist. *DV*, an Icelandic tabloid, marvelled that despite all the warning signs, the American had "decided to trust the [GPS]." Before long, his experience made international news, with coverage in the *Daily Mail*, on the BBC and in the *New York Times*. The manager of the hotel in Reykjavík had seen reports on Santillan's odyssey and, to make up for the traveller's



Tiny Siglufjörður is rarely mistaken for Reykjavík – except by the occasional GPS

hard time, offered him a free stay and a meal at the fish restaurant next door.

Out in the streets, which were full of revellers celebrating the annual Winter Lights Festival, Icelanders corralled the Lost Tourist for selfies and plied him with shots of the local poison, Brennivín, an unsweetened schnapps. As a band played a rock song outside, Santillan kept hearing people shouting his name. Some guys dragged him up a stairway to a strip club, where one of the dancers also knew his name. The whole thing seemed surreal. “I just felt like, ‘This isn’t happening to me,’” he says.

Still, he was going to ride it out as long as he could. After the marketing manager of the country’s most famous getaway, the Blue Lagoon

geothermal spa, wrote to him offering a free visit, Santillan headed there the next day. The address came preloaded in his rental car’s GPS, since it was the one place everyone wanted to go.

As Santillan drove out under the winter sky, he marvelled at how far he had come. Not long ago, he’d been just another working stiff on his couch in New Jersey. Now he was a celebrity. He pictured himself resting in the cobalt blue waters, breathing in the steam. But half an hour later, when his GPS told him he had arrived, he got a sinking feeling. Looking out the window, he saw no signs of a geothermal spa, just a small lone building in what seemed like the middle of nowhere. The Lost Tourist was lost again.

For whatever reason, the GPS had

led him not to the Blue Lagoon but to some convention centre off an empty road. As he stepped into the building, he was recognised. The fact that Santillan was lost again made him all the more credible. After patiently posing for a bunch of pictures, he succumbed to an old-fashioned way of getting to where he was going: following the directions given to him by another human being.

And so, with the GPS turned off, he drove on – a right here, a left there – looking for landmarks along the way. Before long, he was soaking in a steamy

bath, white volcanic mud smeared on his face. By then he'd already vowed to return to Iceland. *Maybe*, he thought, *I'll even live here at some point.*

Until he returns, he has something to remember his misadventure by: an Icelandic GPS. The rental agency presented it to him when he returned his car. It's a reminder of his time as the Lost Tourist, a nickname he considers a badge of honour. "I like it," he says, "because that's how you find interesting things. If you don't lose yourself, you're never going to find yourself." **R**

OUTSIDE (NOVEMBER 15, 2016) © 2016 BY MARIAH MEDIA NETWORK LLC, OUTSIDEONLINE.COM.



RECALCULATING!

Our readers share their funniest GPS-inspired snafus.

■ I was driving to a hotel to give a presentation. The GPS directed me to exit the freeway and drive for miles on a road that went from tarred to dirt. Eventually I came to a high fence topped with barbed wire and a gate with an armed guard. "I'm guessing that this is not a hotel," I said to the guard. Shaking his head slowly, he said, "Not unless you're a guest of the state."

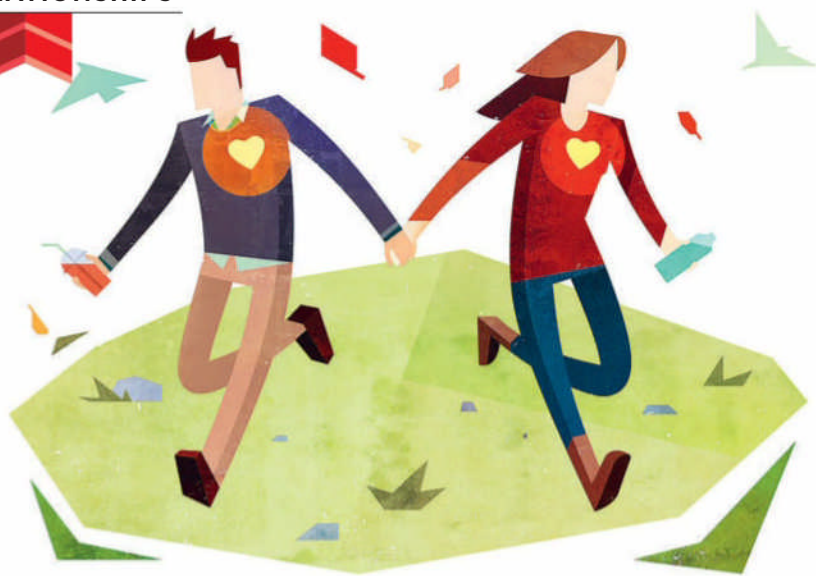
RHONDA GILBERT

■ I was driving down south in an unfamiliar area when my GPS told me to make a right turn. I was on a bridge.

ANN CAPPELLO

■ I used my new navigation app to help me find my way to a writers' conference. After a long drive, I parked my car and, first things first, immediately headed for the crowded restroom. I found a stall and settled in. That's when a loud, clear voice from my phone announced, "You've arrived at your destination!"

ANITA MORRISON



Making Connections

The remarkable science behind
how – and why – we bond with others

BY DANIELLE GROEN

ILLUSTRATIONS BY VICTOR WONG

IN THE LAST 25 YEARS, numerous scientific studies and reviews have shown us what, exactly, friends are for: they slash our risk of mortality in half, double our chances of recovering from depression and make us 4.2 times less likely to succumb to the

common cold. According to Oxford University psychologist Robin Dunbar, they're even responsible for our massive brains – we need that neural power to keep track of our various complex relationships. Dunbar found that the biggest predictor of a

primate's brain size is the magnitude of its social group.

But what's happening inside our hefty noggins? If there is tremendous evolutionary value in social attachment, could we be wired to develop those bonds? Recent neurological research suggests that's the case.

That Warm, Fuzzy Feeling

Naomi Eisenberger, a professor of social psychology, wanted to know if there was any literal truth to the language we use to describe social connection – that, for example, it makes us feel warm-hearted. For a 2013 study published in *Psychological Science*, she had half the participants hold a heat pack and half hold an unheated ball. Unsurprisingly, members of the former group registered more neural activity in regions that detect and reward physical warmth.

Then Eisenberger gathered messages from the participants' families and friends. Half of these were loving; the rest contained factual statements about the person in question. When the subjects, who were being monitored by way of a brain scan, read the tender messages for the first time, "the same neural regions were active as with the heat packs," Eisenberger says. "We know how important it is to have relationships, and we are borrowing from those brain regions that are associated with warmth to signal to us when we feel connected."

Like Attracts Like

It turns out birds of a feather don't just flock together – they actually resemble each other genetically. That's the remarkable finding of a 2014 study by Nicholas A. Christakis, a physician and sociologist at Yale University, and James Fowler, a professor of medical genetics and political science at the University of California at San Diego in the US. The researchers examined 1.5 million genetic markers from 1932 subjects who were divided into two groups of unrelated friends and unrelated strangers, and they discovered that friends may be a kind of 'functional kin'. More specifically, close friends resemble fourth cousins, with the same resemblance in genetic make-up as those who share great-great-grandparents.

After they dug into the data, Christakis and Fowler saw that pals were more likely to have similar senses of smell. As they wrote, "It is possible that individuals who smell things in the same way are drawn to similar environments." That won't come as a surprise to anyone who's struck up a friendship at a coffee shop or musty old bookstore.

What we don't share is even more intriguing: friends have significantly different immune systems. When it comes to the spread of infection, that makes some clear anthropological sense. It's nice to have company. It's even nicer if that company doesn't leave you with a deadly disease.

Mirror Game

So if we know why we seek social connection and with whom, then what keeps us together? In a July 2015 study for *Human Brain Mapping*, Canadian researchers took that question to a group whose members were in a unique position to answer it: couples married for an average of 40 years.

Psychologist Raluca Petrican scanned the brains of 14 married women while they viewed silent videos of their spouses recalling positive experiences (wedding, birth of a child) and negative ones (illness, death of a parent). The catch? The videos were mislabelled, so the emotions the women saw conflicted with the descriptions they'd been given.

When the women watched their cheerful husbands describe a supposedly sombre event, they registered increased spontaneous activity in regions containing mirror neurons, which are critical for establishing empathy. "It helps to be particularly attuned to the silver lining that your partner sees in a really dark time," Petrican says. But when their



spouses showed negative emotions about a presumably joyful time, the women inhibited their responsiveness to those emotions – they subdued their mirror neurons. "Otherwise, the women would start to doubt an otherwise positive event that is foundational to their sense of intimacy," Petrican explains. The greater her reported marital satisfaction, the stronger a woman's ability to inhibit her response.

The surprising lesson: when it comes to preserving our friendships and our relationships, sometimes ignorance really is bliss. **R**



THE WORLD'S DEADLIEST MUSIC

The Royal Automobile Club Foundation for Motoring has deemed Richard Wagner's 'Ride of the Valkyries' the most dangerous music to listen to while driving. The frenzied tempo challenges drivers' normal sense of speed – and causes them to gun it.

SOURCE: NAUTILUS

Quotable Quotes

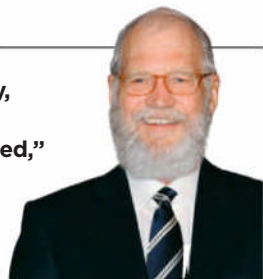


Lately all my friends are worried that they're turning into their fathers. I'm worried that I'm not.

DAN ZEVIN, author

Somebody will say, "Remember when so-and-so happened," and I'll say, "Jeez, I sure don't."

DAVID LETTERMAN, comedian



My grandmother always used to say, "If you've got a dollar, there's plenty to share."

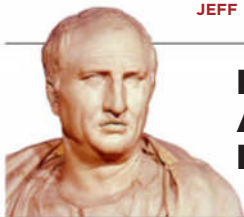
RIHANNA, musician

Don't laugh at other people. When you do, the people around you naturally wonder whether you sometimes laugh at them.

JEFF HADEN, writer

IF PEOPLE FOUGHT SIN AS HARD AS THEY DO MIDDLE AGE, EARTH WOULD BE A MORAL PARADISE.

HAL BOYLE, columnist



IF YOU HAVE A GARDEN AND A LIBRARY, YOU HAVE EVERYTHING YOU NEED.

CICERO, Roman philosopher

I have always thought that the essential foundation of human rights is love. Love for one another. Empathy for fellow human beings.

THE HON MICHAEL KIRBY, Australian High Court judge (retired)

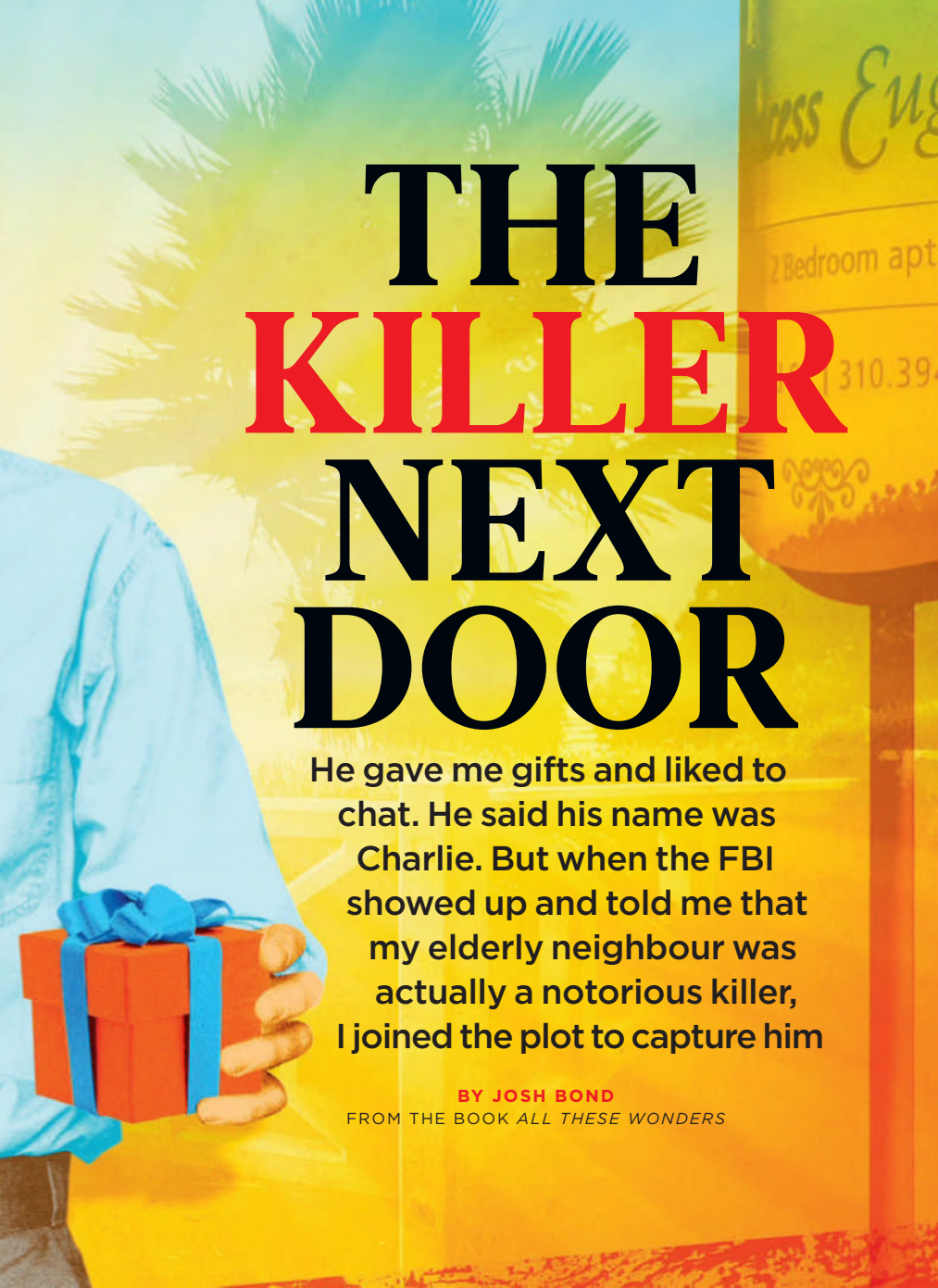
DRAMA IN REAL LIFE

BULGER, JAMES J., JR.

Record Form No. 23
Rev. Oct., 1940

Robbery of FD
20 Years B
56 A





THE KILLER NEXT DOOR

He gave me gifts and liked to chat. He said his name was Charlie. But when the FBI showed up and told me that my elderly neighbour was actually a notorious killer, I joined the plot to capture him

BY JOSH BOND

FROM THE BOOK *ALL THESE WONDERS*

I MANAGED A HOTEL in Santa Monica in California for about seven years, as well as the apartment building where I lived, which was across the street. Super-easy commute. It's particularly great when you live in LA.

You meet a lot of interesting people when you manage a building. For example, there was a retired couple who lived in the unit next to mine – the Gaskos. The first time I met the husband, I was in my apartment playing guitar and trying to write a song.

There's a knock on the door, and I open it to find a man in his 70s holding a black case. He tells me that he heard me playing music, and he liked it, which was good, and he thought I could use this black cowboy hat.

Really nice gesture. I thank him, and he says his name is Charlie.

So fast-forward four years, and I'm taking a nap on my couch. I'd been working for two weeks straight, no days off, on call every night. But this particular Wednesday, I was taking off work early and I was going to see this band, My Morning Jacket, in Hollywood. I was meeting a friend. All planned out.

At 2pm the phone rings, and it's my co-worker calling from the office – with the FBI.



The Santa Monica apartment complex where Bulger and the author were neighbours

Before I know it, I'm on the phone with an FBI agent, and he says, "I need to talk to you about a tenant in your apartment building."

I'm on my couch, so I say, "Can we do this tomorrow?"

He says no. "Where are you? Come here now."

So I get to my office, and there's a large man wearing a dark T-shirt and jeans. He closes the door and throws a manila folder down on the desk. He opens it and points to a sheet of paper. Across the top is *WANTED*, and underneath is a photo of a man and a woman, with the names *Catherine Greig* and *James J. 'Whitey' Bulger*.

The officer asks if these people live in the apartment next to mine. And at first glance, I know the woman is my neighbour, Carol Gasko. Yes, I know these guys. These are my neighbours.

And while I've never heard the name Catherine Greig, the name Whitey Bulger is very familiar. I had heard it many times when I was at Boston University. But I didn't really know anything about him. He was a Jimmy Hoffa-type guy to me, like, "Oh, this guy's missing. He's never gonna be found." It was almost like a joke.

So I'm standing there, and the FBI agent says, "What do you think?"

I say, "What does my face tell you?"

He says, "I need percentages."

I say, "Ninety-nine point five, a hundred per cent."

So he gets on his mobile phone, and while this is happening, it feels like I'm in a movie after an explosion where the sound just disappears and you're trying to process something

that you're not familiar with. You don't know what's going on, and you don't know what's about to happen.

This is an old man who bought me a bike light one time because he was worried about me riding my bike at night without one. And now I'm discovering he's a notorious fugitive.

Another agent, this one in a Hawaiian shirt,

quickly appears. The agent in the dark T-shirt says, "We need the spare keys to his apartment. I don't want to have to bust the door down."

I say, "OK, here are the keys."

The agent in the Hawaiian shirt leaves, and then the other agent says, "Look, this guy's pretty high on the Most Wanted list. We could use your help apprehending him."

My first response is, "I just gave you the keys to his apartment and told you he lives there. So I'm not really sure what else I can do."

He says, "Well, we can't just go

"Look, this guy's pretty high on the Most Wanted list. We could use your help apprehending him"

to his apartment. We have to make sure he's in there. If it's just her, it doesn't really work for us. So why don't you go knock on the door and see if he's there?"

In the previous months, Carol had been telling people in the building, "Charlie has dementia; he has heart problems." They'd put notes on their door during the day that said, "Don't knock on the door." I knew from talking to him over the years that he slept during the day.

I explain this to the agent, and without skipping a beat, he says, "Well, what are you doing tonight?"

I say, "I'm going to a concert."

He says, "You might want to cancel those plans."

So I call my buddy and tell him, "Look, I don't think I'm going to make the show tonight, and I can't tell you why."

As the original shock is dissipating, I realise I'm going to be with these guys until they have Charlie in cuffs. Then things really kick in. One agent places himself at a window that has a good view of the Gaskos' balcony across the street. The other agent wants to go over to my apartment. I tell him to go through an alley and some side streets so he doesn't walk

in front of the apartment building in clear view of Charlie and Carol. I walk through the front entrance and let him in from the back.

The FBI agent says, "They just closed their blinds. Did you tip 'em off?"

"I've been with you the whole time. No, of course not."

We get to my apartment, and I draw

him a floor plan of the Gaskos' place. He's throwing ideas around about how to get this guy out of his apartment.

My living room wall shares a wall with Charlie's bedroom, so I'm like, "Uh, you know this guy can hear everything we're saying? Like, he's repeated conversations I've had at night with my friends, asking me why we don't curse or

fight as much as he and his friends did in his younger days."

We go into my bedroom, and he comes up with an idea. We're going to break into his storage locker in the garage. We go down to the garage, and the FBI agent goes to get his car; he has some bolt cutters in there.

I'm suddenly pumped up. I'm involved in something. It's like a movie. I'm having fun, almost, at this point. The adrenaline is helping me forget about my relationship with these people over the years. I mean, this is the same man who bought me

"This is the same man who bought me a Christmas present every year for the four years I'd lived there"



Though Whitey landed in prison many times throughout his life, he was on the FBI's Most Wanted list for 16 years before being arrested for the final time, in 2011

a Christmas present every year for the four years I'd lived there.

Once the lock is broken, we go back to my apartment and the agent's telling me, "OK, this is what's gonna happen. I'm gonna go down, we're gonna get everything set, I'm gonna call you and you knock on his door and bring him down."

So I say, "No. I'm going to go across to my office to call him, and I'm going to tell him to meet me there. Then you guys take care of your business."

I'm in my office, and I'm thinking about this guy, my neighbour, who looked after an old woman on the first floor. Who one year, when I didn't write a thank-you note for a Christmas present he gave me, gave me a box of stationery.

I'm thinking, *What did this guy actually do?*

So I go to Wikipedia, and I'm reading about murders and extortion and gambling.

I get to the bottom, and in one of

his last public sightings with one of his Mafia buddies, there's a quote from him: "When I go down, I'm going out with guns blazing."

I start to rethink my involvement in the day's events.

Conveniently, my phone rings, and it's the FBI, and they say, "Make the call."

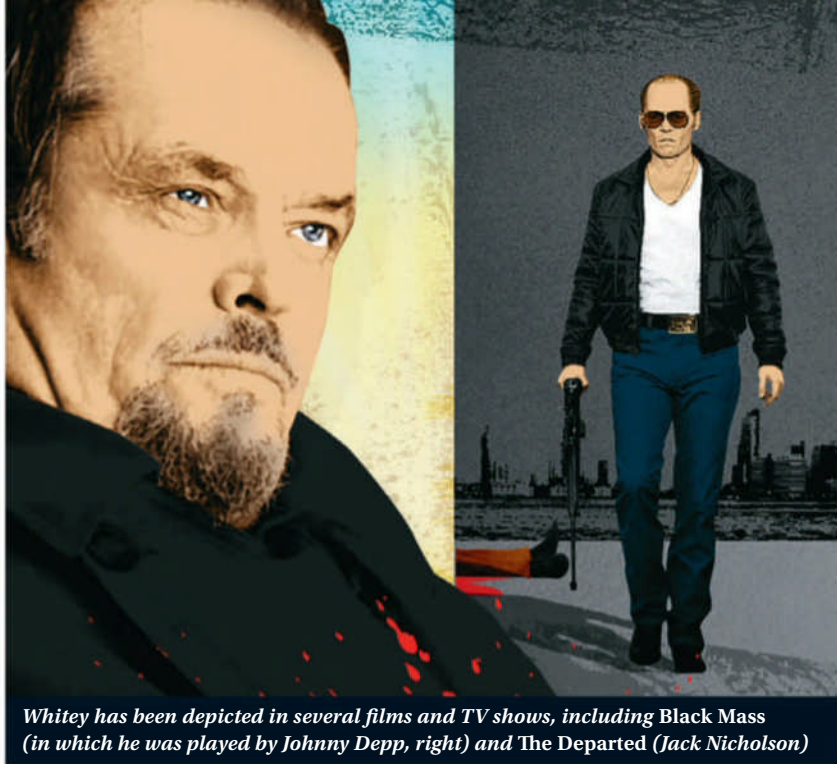
I start to waver: "Look, man, I just read something about this guy ... and I don't know about this."

He says, "No, no, no - he'll never know. He'll never know." Which is obviously not true. But I am this close to getting to my concert, so I say, "All right, I'll make the call."

I call the Gaskos, and there is no answer. I am relieved. I am so happy that they didn't answer the phone. I call the agent back, and I say, "Hey, man, sorry. They didn't answer. Going to have to do something else."

He says, "Are you sure you don't want to knock on the door?"

And I'm like, "Look, man, curtains



closed, guns blazing. What if he comes to the door with a gun?"

He says, "Just be like, 'Hey, man, what's going on?'"

I'm thinking to myself, *Uh, he will shoot me before I finish that one statement.*

I tell him I'm not going to do that. But while this is going on, Carol calls back. And so I get on the phone and I explain to her that the storage unit's been broken into. Either I can call the police or Charlie can meet me in the garage and we'll look at it.

So she discusses this with him, and she says, "He'll be down in five minutes."

"All right, great." I hang up and call the FBI. "He's on his way. Do your thing."

Then I walk outside, and Carol walks out on her balcony, which is directly across the street. She looks at me, and then she quickly looks down to the garage, and then she looks back at me. I don't know if she knows, but she looks worried.

She walks back in, and then I get a call from the FBI, and they say, "We got him. Go to your concert."

So I go back across the street to my apartment to change clothes, and the adrenaline – the rush – just hits me.

I go downstairs, and as soon as I open the door to the garage, it's like a slow-motion shot – there are two SUVs and half a dozen FBI agents. And my neighbour, Charlie Gasko, is standing there in cuffs, surrounded by agents, laughing and telling stories.

He almost looks relieved. I see Carol standing a few feet away, also in cuffs. And the magnitude of everything that has happened starts to sink in.

She looks at me, and she says, “Hi, Josh,” and I can't speak.

I just meekly wave, and walk to my car, and get on the highway, and call my brother, and say, “You'll never guess what happened to me today.”

“What?”

“I helped the FBI arrest the most wanted man in the country.”

So a couple of months later, my family's a little worried about me, and my friends are taking bets on how much longer I have to live.

I get home one day, and there's a letter in the mail from the Plymouth

Correctional Facility. I open it, and I see the same familiar cursive writing and the same ‘shoot the breeze’ dialogue tone that I knew from four years living next to Charlie Gasko.

But in this letter, he's reintroducing himself as Jim Bulger.

And so I write back to him, and I say, “Look, you know I had something to do with the day of the arrest, and my family's a little worried. So, *uh*, you know, just a little note of ‘everything's good’ would be nice.”

He writes back and says, “Look, they had me with or without your help. No worries.”

So that made my mother feel better, definitely.

New neighbours eventually moved in, and they seemed like nice people.

But what do I know? **R**

After his capture, James Bulger was tried in Boston and convicted on charges related to 11 murders and other crimes. He was sentenced to two life terms and is currently in prison in Florida.

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SPEAKING OUT

We all have our head-in-the-clouds moments:

“I guess I'm gonna fade into Bolivian.” **MIKE TYSON**

“It's clearly a budget, it's got a lot of numbers in it.” **GEORGE W. BUSH**

“I've been noticing gravity since I was very young.” **CAMERON DIAZ**

SOURCE: SADANDUSELESS.COM

Laughter

THE BEST MEDICINE

DO THE MATHS

The problem with maths puns is that calculus jokes are derivative, trig jokes are too graphic, and algebra jokes are formulaic. But these jokes are guaranteed to multiply your enjoyment.

Q: Did you hear about the statistician who drowned in a river?

A: It was a metre deep, on average.

*Old mathematicians never die.
They just lose some of their functions.*

Q: Why don't calculus students throw parties?

A: Because you should never drink and derive.

Q: What do you call a number that can't keep still?

A: A roamin' numeral.

Q: Why should you never mention the number 288?

A: It's two gross.

TEMPTING FATE

While in surgery following a heart attack, a middle-aged woman sees a vision of God by her bedside.

"Will I die?" she asks.

God says, "No. You have 30 more years to live."

With 30 years to look forward to, she decides to make the best of it. So, while in hospital, she gets a face-lift, breast implants, liposuction, a tummy tuck, hair transplants and

collagen injected into her lips. She looks great!

The day she's discharged, she exits the hospital with a swagger, and is immediately hit by an ambulance and killed.

Up in heaven, she sees God. "You said I had 30 more years to live!"

"That's true," says God.

"So what happened?"

God shrugs, "I didn't recognise you."

Source: ecclezzia.com



UNWAG THE DOG

A man walks into a vet's office and asks to have his dog's tail removed. The vet, after expressing his reluctance to perform such an operation unless completely necessary, asks the dog owner why he wants this service performed.

"Well," replies the man, "my mother-in-law is coming to stay and I don't want her to see any signs of welcome."

SUBMITTED BY DAVID MACRAE

My wife told me to stop impersonating a flamingo. I had to put my foot down.

Seen online



SELECTIVE HEARING

It amazes me how much exercise and extra fries sound like.

@INNOCENT_KNAVE ON TWITTER



THE MOTHER OF ALL ISSUES

John tells his therapist, "Last night I dreamed you were my mother."

"How do you feel about that?" asks the psychiatrist.

"I haven't had time to think about it," says John. "I overslept this morning and remembered I had an appointment with you, so I gobbled down a cookie and a coke and came straight here."

"A cookie and a coke?" the doc replies. "You call that breakfast?"

SUBMITTED BY MATHEW STOCKARD

ANOTHER TERM FOR CAMPING SHOULD BE 'ARGUING OUTSIDE'.

COMEDIAN TODD GRAHAM

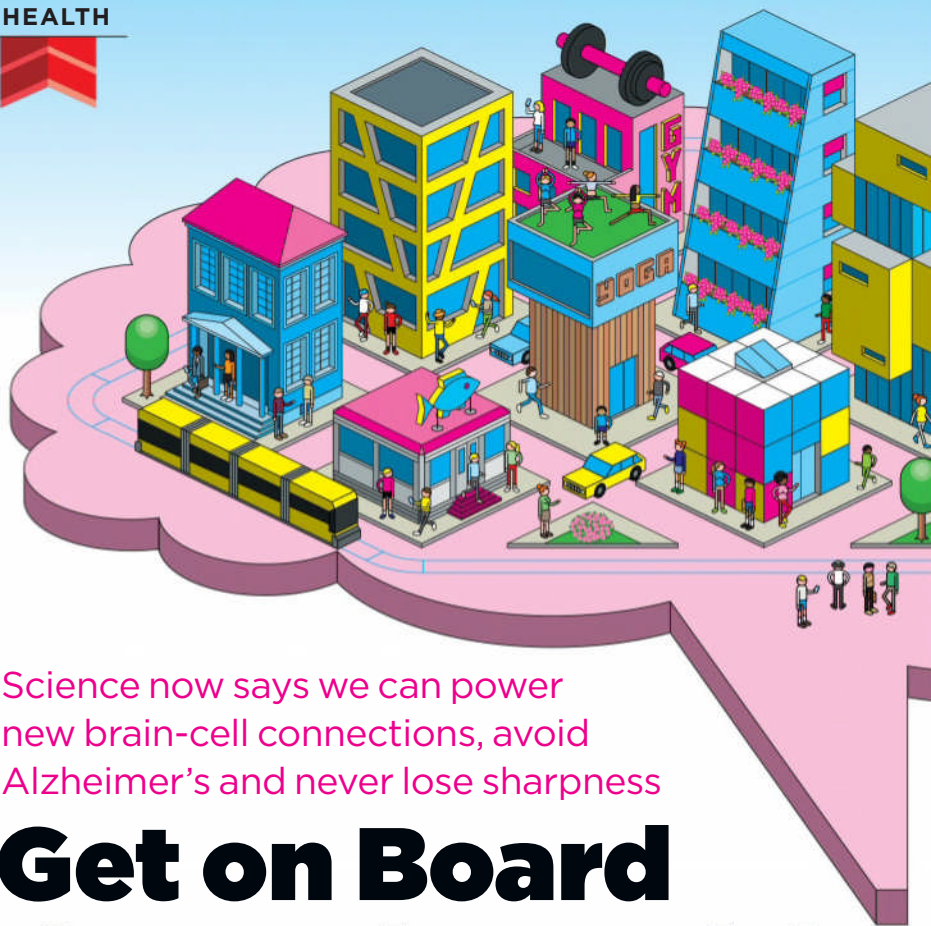
SILENCE IN COURT

Two neighbours appeared in court, each woman accusing the other of causing trouble in their building.

"Let's get to the evidence," the judge said in an effort to end their bickering. "I'll hear from the oldest woman first."

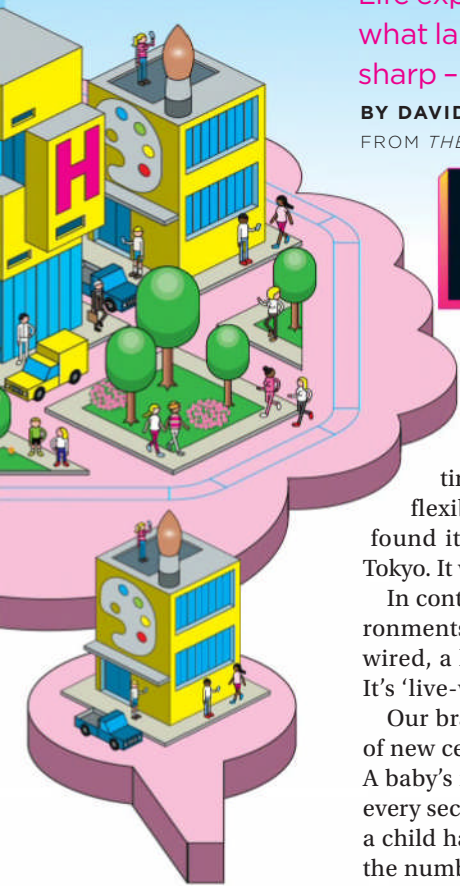
The case was dismissed due to lack of testimony.

SUBMITTED BY
ALEX CRACKNELL



Science now says we can power
new brain-cell connections, avoid
Alzheimer's and never lose sharpness

Get on Board the Brain Health Revolution



Life experiences shape your brain. Here's what landmark studies say about staying sharp – and, dare we say, wise – for life

BY DAVID EAGLEMAN

FROM *THE BRAIN: THE STORY OF YOU*

Every human being enters the world with a remarkably unfinished brain. Dolphins are born swimming; giraffes learn to stand within hours. But we humans? We're helpless for years.

However, this seeming limitation actually signals our greatest advantage. Baby animals develop quickly because their brains wire up according to a pre-programmed routine. But that preparedness trades off against flexibility. Imagine if some hapless rhinoceros found itself on the Arctic tundra or in downtown Tokyo. It would have no capacity to adapt – or thrive.

In contrast, humans have thrived in different environments. Instead of arriving with everything hard-wired, a human brain is shaped by life experience. It's 'live-wired'.

Our brain's flexibility derives not from the growth of new cells but from how those cells are connected. A baby's neurons form two million new connections every second as they take in information. By age two, a child has more than 100 trillion synapses – double the number an adult has.

This peak represents far more connections than the brain will need. The incredible blooming is then supplanted by neural 'pruning.' As you mature through the teen years and into your 20s, 50 per cent of your synapses will be pared back.

Which synapses stay, and which go? When a synapse successfully participates in a circuit, it is strengthened; synapses that aren't used are weakened and eventually eliminated. Just as with paths in

on

a forest, you lose the connections that you don't use.

Cognitive Flexibility

By age 25, our brains appear to be fully developed. But even in adulthood, the brain can form new connections. London's cab drivers show just how impressive this can be. They undergo intensive training to pass a memorisation test of London's extensive roadways: 320 routes, 25,000 individual streets and 20,000 landmarks. Neuroscientists from University College London scanned the brains of several cab drivers. Each driver's posterior hippocampus – an area vital for memory, in particular spatial memory – had grown physically larger than the hippocampi of the control group. The longer a cabbie had been doing the job, the bigger the change.

Similarly, everything you've experienced thus far has altered the physical structure of your brain. Your family of origin, your culture, your friends, your work, every movie you've watched, every conversation you've had – these have all left their footprints in your nervous system. As you age, too, your brain's flexibility, and what you choose to expose it to, matters deeply.

This was revealed by the Religious Orders Study, a research project following more than 1100 clergy members across the US. Since 1994, this group has undergone regular

psychological and medical tests. So far, Dr David Bennett and his team at Rush University in Chicago have examined tissue from over 350 brains.

The team expected to find a clear-cut link between cognitive decline and the three most common causes of dementia: Alzheimer's, stroke and Parkinson's. Instead, here's what they found: some people were dying with a full-blown Alzheimer's pathology – brain tissue ravaged by the disease – without having cognitive loss. What was going on?

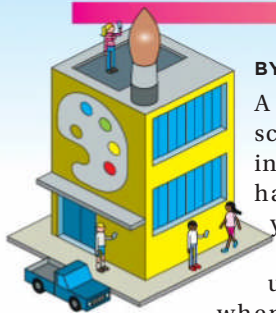
The team went back to its data for clues. Bennett found that cognitive exercise (keeping the brain active through doing crosswords, reading, driving, learning new skills and having responsibilities) was protective. So were social activity, social networks and physical activity.

The participants with diseased neural tissue but no cognitive symptoms had built up what is known as cognitive reserve. As areas degenerated, other well-exercised areas took over those functions. The study demonstrates that it's possible to protect our brains and slow the ageing process.

We're at an unprecedented moment in history, one in which brain science and technology are co-evolving. We can now hack our own hardware, and as a result, our brains don't need to remain as we've inherited them. Who we become is up to us.

EXCERPT FROM *THE BRAIN: THE STORY OF YOU* BY DAVID EAGLEMAN. © 2015 BY DAVID EAGLEMAN.
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Genius Brain Habits



BY KIMBERLY HISS

A rich new area of science is analysing which healthy habits best keep your mind and memory blithely unaffected even

when a brain scan would reveal the inflammation,

free radical damage and weakened synapse connections that often cause 'senior' moments in one's 40s and beyond. Dr Kenneth S. Kosik, codirector of the Neuroscience Research Institute at the University of California, Santa Barbara, has studied which habits most powerfully boost our cognitive function. Here he shares the most up-to-date research from innovative labs, plus the best tips from his book *Outsmarting Alzheimer's*.

Play Games with Your Frontal Lobe

Whether you're deliberating a chess move or bluffing at cards, you're also giving the frontal lobe, the area of your brain that handles executive function,

a workout. "The frontal lobe is particularly vulnerable to degeneration and the effects of ageing," says Kosik. According to a 2014 University of Wisconsin study, older adults who routinely worked on puzzles and played board games had higher brain volume in the area responsible for cognitive functions, including memory, than those who didn't play games.

Stay Young with Saa, Taa, Naa and Maa

Dharma Singh Khalsa, president and medical director of the Alzheimer's

Research and Prevention Foun-

dation, has spent many years studying the meditative tradition called Kirtan Kriya and has found that daily 12-minute sessions of the practice can improve blood flow to the brain and possibly even increase levels of telomerase, an enzyme that

slows cell ageing. The practice is

simple: while breathing deeply, chant the Sanskrit words *saa, taa, naa, maa* (which mean 'my divine self') while moving your thumb to touch your index, middle, ring and pinkie fingers with each new sound. Like any

**Your
Amazing
Brain**

**The brain generates
the equivalent of about
ten to 15 watts of energy,
enough to power
an LED bulb.**

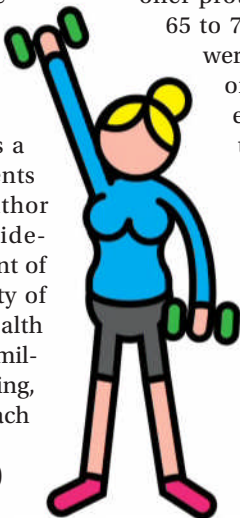
Source: northwestern.edu

meditation, it may help to lift anxiety and fatigue.

Protect Your Mind from Your Heart

Scientists surveyed volunteers on seven familiar heart-health factors and tested their cognitive performance at two points over eight years. The results found that the more heart-healthy habits people had, the less cognitive decline they exhibited. A stronger cardiovascular system means a stronger pipeline of nutrients to the brain, says lead author Hannah Gardener, an epidemiologist in the Department of Neurology at the University of Miami. The seven heart-health ideals to strive for may be familiar (if they seem overwhelming, Gardener points out that “each one helps”):

- Not smoking (or quitting)
- Healthy body mass index (under 25)
- Physical activity (for at least 150 minutes a week)
- Healthy total cholesterol (under 200 mg/dL)
- Healthy blood pressure (under 120/80 mmHg)
- Healthy blood glucose (under 100 mg/dL)
- Balanced diet (rich in fruits, vegetables and whole grains; low in sodium and sugar).



Lift the Quality of Your White Matter

As the brain ages, its white matter often develops small lesions because of disrupted blood flow, leading to impaired cognitive function and mobility. Researchers at the University of British Columbia wanted to determine whether strength training might offer protection. Women aged from 65 to 75 who already had lesions

were divided into three groups: once-a-week strength trainers, twice-a-week strength trainers and those who did other exercise. The results: women who strength-trained twice a week showed significantly less progression of white matter lesions than the other two groups did. Key moves you can try at home (using soup cans for weight): bicep curls, tricep extensions, calf raises, mini squats, mini lunges and lunge walks. Aim for 45 minutes a session.

Make Moves Against Alzheimer's

Exercise benefits the brain by improving vascular health – but newly published research suggests it also combats the chronic neuro-inflammation observed in Alzheimer's, depression and other brain diseases. In such neurological conditions, the inflammation

that normally clears tissue damage doesn't shut off and starts to interfere with communication between neurons. Exercise has proven anti-inflammatory effects against diseases such as diabetes and rheumatoid arthritis, so that could be why it protects brain health as well, says assistant professor Jonathan

Little in a review article in *Brain Research Bulletin*.

"Any type of moderate-intensity exercise, such as walking, cycling and swimming, can have anti-inflammatory effects," says Little. Aim for about 30 minutes a day.

Spend Time with Family and Friends

Kosik points to a research study at Rush Alzheimer's Disease Center in Chicago that showed that adults who frequently spent time with others – volunteering, being part of a book club or a card game, having dinner dates with their friends, or visiting family – had a 70 per cent lower rate of cognitive decline over 12 years than did seniors with fewer interactions.

Get Your Brain Circuits Singing

Listening to or playing music (touching a piano key or guitar string) can activate the motor cortex; hearing the notes you make can activate the auditory cortex; and feeling moved

by a beautiful passage can activate the emotional centre, or limbic system. "Circuits and networks are stimulated by these activities, which help keep the brain healthy," says Kosik. Older adults who had at least ten years of musical experience did better on cognitive tests, according to a 2011 Emory University study.

Your Amazing Brain

Your brain comprises about 2% of your weight but uses 20% of the body's blood, oxygen and glucose.

From the book *Transcend* by Ray Kurzweil and Dr Terry Grossman

Act to Boost Memory

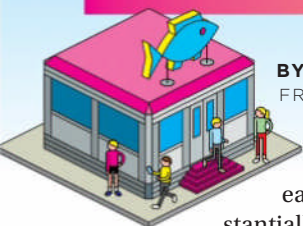
Learning lines for a production or an acting class engages the hippocampus, the temporal cortex and the frontal lobe, says Kosik. In one study, those who went to

acting classes twice a week for four weeks boosted their ability to remember words, numbers and short stories. A follow-up study found they improved word fluency by 12 per cent and word recall by 19 per cent.

Draw Out Your Neural Connections

When you draw, paint or sculpt, you have to make spatial calculations and focus attention on details, Kosik says. Engaging in these activities helps protect octogenarians from mild cognitive impairment, according to a 2015 Mayo Clinic study. Also, 60- and 70-year-old art-class participants boosted scores on psychological resilience tests; MRI images showed their synapses had formed new connections.

A Genius Eating Plan



BY ALEX MLYNEK
FROM BEST HEALTH

Scientific efforts to develop a new eating plan to substantially reduce Alzheimer's risk may be working. Researchers at Rush University Medical Center developed the MIND* diet over a two-year period. They took elements of two proven heart-healthy regimens – the Mediterranean diet and the blood pressure-slashing DASH diet (aka Dietary Approaches to Stop Hypertension). Then they consulted the latest human and animal nutrition studies and tailored a combination designed to boost brain health.

Finally they tested the eating plan on 960 volunteers over four and a half years. The MIND diet reduced Alzheimer's risk by 53 per cent among those who followed the plan strictly, and by 35 per cent for those who followed it moderately well, according to research published in *Alzheimer's & Dementia: The Journal of the Alzheimer's Association*.

The brain-boosting benefits come down to two general principles: limit foods that are high in saturated fats and kilojoules but have low nutritional value, and eat more foods that offer nutrients that help your brain,

says Martha Clare Morris, the plan's chief creator and the director of nutrition and nutritional epidemiology at Rush. "The top nutrients are vitamin E; B vitamins; omega-3s; some of the carotenoids, lutein in particular; and flavonoids," she explains. On the next page are the ten foods to eat and five foods to limit every week, which make up the core of the MIND diet.

* MIND is short for Mediterranean-DASH Intervention for Neurodegenerative Delay.



Do Eat ...

- At least six servings of leafy greens every week. (That's a salad almost every day.)
- At least one serving of another vegetable every day.
- More than two servings of berries every week.
- More than five servings of nuts every week. (Try them as a daily snack.)
- Extra-virgin olive oil instead of butter and as your primary cooking oil.
- More than three servings of whole grains every day.
- Fish that hasn't been fried for at least one meal every week.
- Beans for more than three meals every week (that is, roughly every other day).
- Poultry for more than two meals every week.
- A glass of wine every day (though Morris says there's no need to drink this if you're avoiding alcohol).

Do Limit ...

- Butter to one tablespoon per day.
- Cheese to less than one serving per week.
- Red meat to fewer than four meals per week.
- Fried and fast food to less than one serving per week.
- Sweets and pastries to fewer than five servings per week.

From Paralysed to Playing Guitar Hero

When Ian Burkhart broke his neck diving into a wave in 2010, he had no idea that about four years later he would make history as the first quadriplegic to regain control of his limbs using his own thoughts. At the time, the devastated 19-year-old knew only that an experimental study at Ohio State University Wexner Medical School offered hope. Burkhart's spinal injury had severed the communication pathway between the motor cortex in his brain and the muscles in his limbs, but this study proposed a detour.

Doctors had Burkhart think about moving his hand while researchers took fMRI scans to light up key brain areas. Based on those coordinates, in April 2014, Ali Rezai, director of Ohio State's Center for Neuromodulation, placed a microchip smaller than a pea in the motor cortex, which controls the hand. The chip was connected via a computer to an electrode-studded sleeve on Burkhart's arm that stimulated his muscles. Burkhart's thoughts now had a new bypass to his hand.

Two months later, Rezai was standing behind his patient in a lab crowded with doctors, engineers and family, all eyes on Burkhart's right hand. When it moved for the first time, Burkhart made history. "It was a surreal moment," Rezai remembers. "The whole team was amazed, but then we said, 'OK, the work is just beginning. He's got to be able to pick up a cup of coffee.'"

In the years since, subject and software have been learning from each other. "It's phenomenal seeing the brain and computer coming together," says Rezai. Burkhart is now able to swipe a credit card and play *Guitar Hero*, a music video game.



12 Things Only Bookworms Understand

Avid readers have a few quirks that other people might find ... well, a little odd

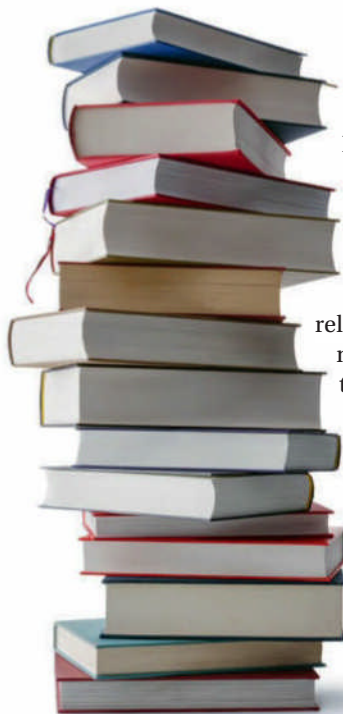
BY AMIT LUTHRA

You're emotionally attached to fictional characters

Have you ever become so attached to characters in a book that they start to feel like real people? Books provide such vivid insight into characters' personality and psyche that you might feel like you know them even better than you do your own peers and acquaintances. And if the characters are personally relatable, they can start to feel like actual friends. You may even have experienced a romantic connection to fictional characters (*cough cough* Mr Darcy). But no judgment here. As fellow bookworms, we get it.

You know exactly when the next book in a series will be released

As a true bookworm, you prefer reading a series to individual novels so that you don't have to stop at the last page. However, for you, few fates are worse than finishing the latest book in a series only to have to wait years for the next one's release. When a subsequent book is set to be published, you know



“

Time seems to stand still when you're fully engrossed in the text in front of you



exactly when it's hitting the shelves – as you've pre-ordered it, naturally, and you've got a mental countdown running in the interim. The suspense completely eats away at you!

You ignore your basic needs when you're deep in a read

Books are all-consuming for you, and time seems to stand still when you're fully engrossed in the text in front of you. But, in fact, hours upon hours have passed, and you've completely forgotten to eat, shower or get to bed on time. But oh well. For you, any basic needs can wait until you're finished with this chapter. And maybe the next one.

You hate watching movie adaptations

As a lifelong bibliophile, nothing annoys you quite like movie adaptations of books you've read. After all, you remember all the passages so vividly that you can't help but critique a film's many discrepancies. You'd really rather not watch movie adaptations if you can help it, as they risk deviating from your beloved literary works and not doing them justice.

You adore literary gifts

You may not be materialistic, but if you're a bookworm, you can never resist buying items related to your favourite books, regardless of whether

or not you actually need them. For example, you wouldn't think twice about purchasing the Library Candles by Paddywax, with your favourite quotes printed across the front and scents that are inspired by iconic authors. We swear Jane Austen must have smelled exactly like her gardenia, tuberose and jasmine candle.

You prefer the feel of a physical book to an e-book

Call us old-fashioned, but we bookworms still resist making the switch to digital texts. There's something about the weight of a hardback in your lap, the sound of turned pages, and feeling the remaining chapters dwindle in your right hand as you power through them. E-books may be more environmentally friendly, but they can't measure up to the sensory experience of physical books we so adore.

You can quote your favourite passages verbatim

If there's one thing someone should never do in front of a bookworm, it's misquote a line from a novel. Whenever it happens, you're quick to correct them. Bookworms have an uncanny memory for text, so if you're one of them, you're probably guilty of reciting your favourite lines all the time. And you don't just recite

them verbatim; you use the same accent and inflection of the original character.

You love the smell of new books

Every time you crack open a brand-new book, you lean forwards to smell its pages. The scent is not only all too

familiar to you, but it also brings you a unique joy. The smell is like being a kid and opening a present on Christmas morning – you feel pure excitement at the prospect of owning a classic. You also know the difference between the smell of old and new books, and you love

them both for different reasons.

You can recall the details of fictional worlds as if you've been there

Diagon Alley, Middle Earth, Narnia and District 12 – these places aren't just two-dimensional fantasies to you. For a real bookworm, these fictional worlds exist. In fact, you know them so intimately that it can be hard to determine if perhaps you've actually been there.

You can spend hours in a bookshop

Most people feel a rush of excitement walking into a clothes shop, but as a

“
Some people collect shoes, others collect handbags or football cards, but you collect books



total bookworm, you feel completely at home in bookshops instead. You could spend hours scanning the shelves, running your fingers along the many spines and seeing what's new. To you, bookshops aren't just comforting safe havens, they make you feel like a kid in a candy store, and you wish you could try them all.

Your personal library is a source of pride

Some people collect shoes, others collect handbags or vintage football

cards, but you collect books. It's plain and simple. Your books are like family to you, and they're a real source of pride. You dream of one day having a floor-to-ceiling wall of books in your home, or even an entire study containing your collection. Whenever you have to downsize or donate your books, parting with them is a genuinely painful experience.

You're inspired by fictional characters

As an avid reader, you've come across a number of protagonists and authors who have permanently changed your life. You're a different (and hopefully better) person for having experienced these people, real or imagined. To pay homage, you feel the need to etch them into your everyday life. Perhaps you've gotten a tattoo of your favourite quote, or named your dog Fitz for F. Scott Fitzgerald. As a bookworm, you see nothing wrong with naming your child after characters such as Atticus, Holden or Rosaline. In fact, you find it commendable. **R**



APPLES AND ORANGES

An apple a day keeps anyone away, if you throw it hard enough.

STEPHEN COLBERT

You can't compare an apple to an orange. It will cause a lot of self-esteem issues. **CRAIG SHEFFER**

All in a Day's Work

HUMOUR ON THE JOB



TORTURED ENGLISH FROM AROUND THE WORLD



■ In a Norwegian cocktail lounge: 'Ladies are requested not to have children in the bar'.

■ In a Nairobi restaurant: 'Customers who find our waitresses rude ought to see the manager'.

■ At a Budapest zoo: 'Please do not feed the animals. If you have any suitable food, give it to the guard on duty'.

■ In a Bangkok drycleaner: 'Drop your trousers here for best results'.

■ On a highway sign in Kenya: 'When this sign is underwater, this road is impassable'.

■ In a Copenhagen airline ticket office: 'We take your bags and send them in all directions'.

Source: linguagrecia.com

PAY IT FORWARDS

Our utility customers often don't understand the intricacies of their bills. Recently, a man called asking how much he owed.

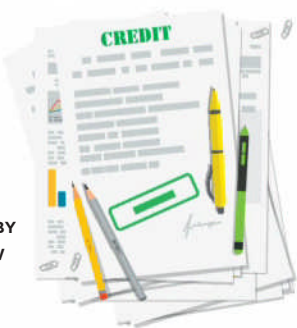
"Actually," I said, "you have a credit for \$98.70."

"So that means I'm ahead on my bill?" he asked.

"That's right!"

After a pause he asked, "And when is that due?"

**SUBMITTED BY
TIFFANY JEW**



COLD COMFORT

Before the cup of coffee had even touched the table, my brother told the waitress, "Take it back. It's cold."

The waitress quickly brought him

another cup, only to be told once again, "Take it back. It's cold."

The third cup, however, he accepted, which prompted the waitress to ask, "How did you know the first two cups were cold without even sipping them?"

My brother said, "Because with the first two, your thumb was in the coffee." **SUBMITTED BY RAY GRAMBIHLER**

NOT HIRED

At our pet store, one of the questions we ask job candidates is, "If you could be any animal, what would it be?" One interviewee said he would be a turtle because he's always really slow and he's never in a rush. Source: reddit.com

SUBLIMINAL MESSAGING

A client called to report an accident and asked if her insurance rates would go up.

"Our underwriting department determines that," I replied, then asked for her registration number. Verifying her information, I said, "NMF? Is that N as in Nancy, M as in Mary and F as in Frank?"

"Yes," she said. "But could you please tell your underwriters that it's also N as in 'not,' M as in 'my' and F as in 'fault?'" Source: gcfl.net

GLASS HALF FULL

I have 11 missed calls from my boss, and I can only assume it's because he's super excited to give me a raise.

**@NOTICABLYBACON ON
TWITTER**

SIGN WARS

During a staff meeting, my boss was complaining that people didn't

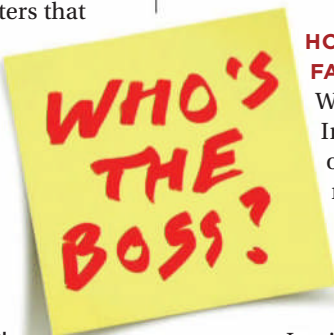


"No, I don't need a home equity loan, but I AM curious to know how you were able to reach me on my stethoscope."

respect him enough. The next day he added a sign to his door that said, "I am the boss".

One of my fellow employees, not appreciating the change, added a post-it note that read, "Your wife wants her sign back".

SUBMITTED BY SHANIE LLOYD



HOMEMADE FABRICATIONS

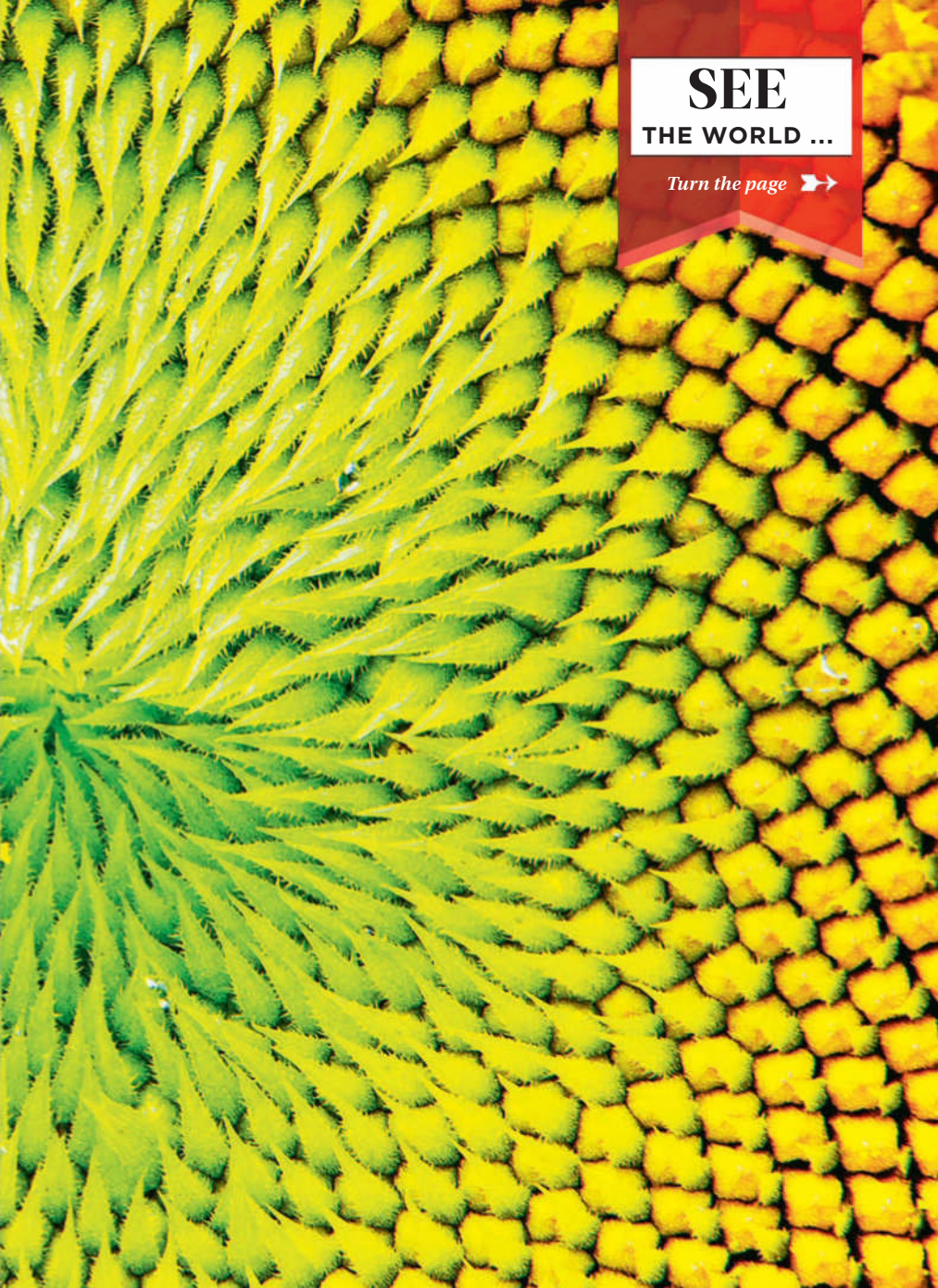
While shopping in India, I asked the store owner for any locally made yarn. The merchant brought down a skein that was clearly marked, 'Made in China'.

I pointed it out, but he insisted I was wrong.

"Oh no," he assured me. "Only the label is made in China."

SUBMITTED BY JANE GELMAN





SEE
THE WORLD ...

Turn the page ➡



... DIFFERENTLY

The sunflower's name is very fitting twice over: not only is it named after the celestial body it so obviously resembles, the plant is also heliotropic, meaning it turns its blooms and leaves towards the sun's light as it arches across the sky every day. Although this yellow blooming beauty originated in North and South America, it is at home all around the globe. At more than nine metres in height, the tallest known sunflower, grown in Germany, was so much taller than the average height of three metres that it made it into the 2015 *Guinness Book of World Records*.

PHOTOS: INDIAPICTURE



Weekend With Uncle Gutta

BY BRIGID DUFFY
FROM QUEST FOR KINDNESS

I HAVE A HABIT of looking up the etymology of words before I start writing, so when I set out to write an essay about my uncle Gutta and kindness, I learned that the word *kindness* is related to *kin*. To be treated kindly is to be treated as if one were a relative, a part of a family. It is to be welcomed in, to be claimed. How funny that the kindness we bestow upon family members can often be the most difficult type to impart.

Uncle Gutta's phone calls were not always met with enthusiasm, but he called often, persistent in winning

over my family's affection. Whenever his area code lit up our caller ID, my two sisters and I tossed around the phone like a game of hot potato. "You answer it!" "I answered it last time!" "It's your turn!"

It wasn't that we disliked our uncle, but the man could talk. Answer the phone, and the next 90 minutes of your life would dissipate like snowflakes in the river.

One hot day in summer, Uncle Gutta rang. I knew it was a hazardous time of year to pick up the phone, as he would inevitably urge us to make the long drive to his home and attend



the Renaissance Faire with him. But after seven years of politely saying, "I'm busy all 12 of those weekends," I was running out of excuses. Still, when I picked up the phone, I was calculating an escape strategy.

"Hey, Uncle Gutta. What's up?"

"I'm sorry to have to tell you ..." he began. There was an unfamiliar exertion in the way he spoke, like he had a lump in his throat. "Ballsey just passed away unexpectedly."

"Oh, wow ... I'm so sorry." *Who the heck was Ballsey?*

"He was one cat that lived up to his name. But he's in a place of peace now."

"Of course."

"So when are you guys going to come out to my pad? I tell you what, the Celtic Fling at the Renaissance Faire is this Saturday. How about you come over for that?"

"That sounds great," I said, my mouth doing the talking without my consent.

"Really? Great!" he replied. "I'll see you on Saturday around 8am."

He hung up before I could change my mind. It was the shortest phone call of Uncle Gutta's life.

When my younger sister and I got into the car to drive to our uncle's the following weekend, it was already 36°C. The air was rich and seedy, like an overripe watermelon. I looked over at my sister, whom I had dragged into this visit, in the passenger seat. Scorn emanated from her small frame.

A couple of hours later, we pulled onto the road where Uncle Gutta lived, and he was waiting on his front porch. A tall, beefy ex-soldier with nine and a half fingers, he was wearing a Scottish kilt, a body-hugging Irish-flag shirt and a 76-cm sword. I couldn't tell if he was going for 'pirate' or 'Renaissance dude' – the distinction was negligible. After we hugged, he showed us around his backyard, which was part enchanted garden and part junkyard.

"This is a scratching post that Ballsey preferred. But he also liked that one," he said, pointing at some outdoor knickknacks.

"And this is where he used to take naps a lot," he continued as he steered us towards an undifferentiated spot on the ground.

"This is a special rock that I dedicated to Ballsey. He liked it here a lot, too. And this is a spot where I come to pray for our family ... and for Ballsey," he said. He paused, and I noticed that he had tilted his head back, as if hoping his eye would reabsorb the tear that fell down his cheek. "You know, it's really great you guys came here."

It was the only statement I'd ever heard him say without that goofy-uncle undertone. And in that moment I realised: here was not only our uncle but a simple guy who lived in the sticks and missed the heck out of his cat.

"I'm glad we came, too, Uncle Gutta," I said. The moment the words left my lips, I realised they were true.

"Me too," my sister chimed in. And

when I looked, I saw that she had also softened.

Then the moment passed, and it was back to business. Uncle Gutta had mapped out our schedule for the Faire: a Tartan Terrors performance, jousting, Irish step dancing, Her Majesty's Royal Performers, and then the Tartan Terrors again. That afternoon, we laughed and jousted and danced. It was the silliest and freest I had felt in a long time.

On the drive home, as our near-heatstroke subsided into exhaustion, I thought about why, out of all the times that Uncle Gutta had begged us to visit, I'd said yes this time. Perhaps being part of a family is to recognise – even subliminally – when one of your kin is in need of some care. We monitor our actions so painstakingly

with friends, colleagues and strangers. But family members often get our autopilot selves. Within families, showing kindness is often not a deliberate act. Rather, it is an instinctive reaching out, a recognition of a need in our kin, and doing our best to fill that

need – even while kicking and screaming.

When my sister and I next saw Uncle Gutta, he presented us each with our own shiny broadsword. My mother took one look at them and muttered, "What on earth are you gonna do with those?"

But to Uncle Gutta, the broadswords were a

crucial accessory for next year's Fling. "This year, you got your feet wet, but next year, you guys gotta go all out."

We smiled, knowing it was his way of saying, "Thanks for coming." **R**

QUEST FOR KINDNESS (APRIL 21, 2011) © 2011 BY BRIGID DUFFY, ALICIABESSETTE.COM.



LOCAL HERO

A red-faced electoral candidate in Western Australia in March this year insisted that he wasn't out of touch with his local district – it was poor reception during his phone call to the printers that resulted in the name of the electorate being spelled incorrectly on his electioneering posters. He is not alone. Embarrassed US officials were forced to remove an official inauguration poster for President Donald Trump from sale after the word *too* was misspelled *to*. ABC.NET.AU, SMH.COM.AU

An eccentric museum in South Tyrol, Italy, reflects one man's unique view of mountaineering

Mountain High Museum

BY ALICE GREGORY FROM *T: THE NEW YORK TIMES STYLE MAGAZINE*

PHOTOGRAPHED BY JOËL TETTAMANTI



Corones, the sixth and latest installation of the Mountain Museum, is on top of Italy's Kronplatz mountain



I FOUND MYSELF 1524 METRES up the Dolomite peak of Kronplatz mountain, lost, alone and completely happy. As I gnawed my way up, I had to stop every 100 metres and catch my breath. But whatever panic and lung-burn I experienced were mitigated by the frosted clover and edelweiss and gentians. The air smelled sweetly of manure and cut grass; the tinkle of cowbells and the call of cuckoos echoed through the valleys.

Waiting for me at the top of the mountain was Reinhold Messner. At age five, Messner scaled his first mountain in South Tyrol, the autonomous province of Northern Italy where he was born and still lives. In the decades that followed, he went on to climb another 3500 peaks and became one of the most celebrated mountaineers of the 20th century, wrote more than 50 books, loaned his name to a line of toiletries and represented the Italian Green Party in the European Parliament.

Now 72, Messner no longer climbs professionally. Instead, he has spent the past decade focusing on the Messner Mountain Museum, six high-altitude institutions in separate locations devoted to the history and culture of mountain climbing.

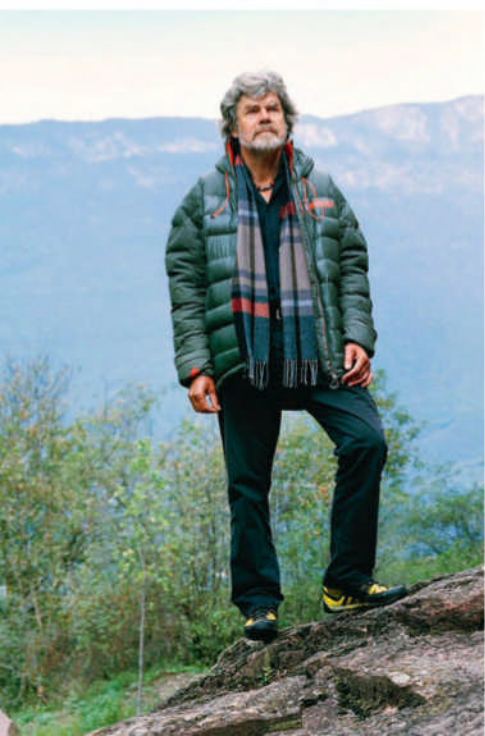
The first museum opened in 1995 in the Vinschgau region. The latest, Corones, a crashed spaceship of a building that opened in 2015, is here on Kronplatz, the nearly 2275-metre mountain that I exuberantly and somewhat stupidly volunteered to climb. Construction of the 1000-square-metre concrete building

involved the excavation of more than 3900 cubic metres of mountain.

Like the other five museums, it recreates, in a pleurably primitive way, the experience of scaling a mountain. The multilevel space is cool and smells faintly of snow. Making your way through the galleries' tunnels, you often find yourself disoriented, returned almost to where you began, as if having miscalculated a switchback. Staircases are mirrored with diagonal glass vitrines filled with ice picks, boots, scrapbooks and carabiners.

"In mountaineering, there is not only the activity, but the philosophy behind it," Messner told me outside the Corones museum. "Some say a moral, but I am against that because all morality is dangerous. All nationalism is dangerous; all religions are dangerous."

Photos, clockwise from top: Villnöss Valley on the Austrian border of Northern Italy, where Reinhold Messner was born; Ripa museum, housed in a 13th-century castle in the Puster Valley; a typically idiosyncratic display; Reinhold Messner





He urged me to look north. Below are South Tyrol's verdant pastures and distant outcrops. We both inhaled. "You don't see one bad situation," he said. Then, in a humble concession to reality, Messner pointed to a distant smokestack and squinted with vague contempt. "Only there, I guess, a little bit."

The sinister, toothy Dolomites, which rise up all around, both exaggerate the loveliness below and cut it with the necessary bit of harshness that is otherwise lacking. It's all too easy to imagine, in a fairy tale-like way, a local child growing up feeling as though his character were contingent upon a successful confrontation with these threatening peaks. Which is, of course, exactly Messner's story.

"For me, when I was a boy, I went beside this beautiful mountain there" – Messner pointed west from the museum's prow-like balcony towards a pleasingly round summit – "and I looked up for a few days with binoculars, and I invented a line where I could climb up. Then, one Sunday I went up with my brother and we did it. It's like a piece of art. The same with the museum. I have an idea, I do it."

Photos, clockwise from top left: A 13th-century castle in the Vinschgau houses Juval museum, which opened in 1995; viewing platform of the Dolomites museum, in an old fort on Monte Rite; the Firmian in Sigmundskron Castle

NO SPORT ENCOURAGES the ostensibly paradoxical impulses of meditative, in-the-moment focus and past-tense memorialising quite like mountain climbing. It seems that everyone who has even dabbled in the endeavour has gone on to document it. But how to do it in a way that begins to approximate the scale of even a small hill?

For Messner, the answer has been interdisciplinary. He told me that he learned how to open and organise a museum by doing it himself, "not by going to museums." His autodidacticism is apparent in the Mountain Museum displays, which are at once charming and confounding and weirdly ambitious.

Housed in a crenellated castle in the quaint town of Bruneck, Italy, the Ripa museum has an extensive collection of fascinating, bewildering artefacts often presented without context. There is a room filled with models of traditional mountain homes in places such as Patagonia, Peru and Kandahar. There is a gallery devoted to international water vessels, another stocked with Tibetan musical instruments, and another with Incan weapons. There are a few human skulls (unlabelled) thrown in for good measure.

Atop a modest mountain 120 kilometres southwest of the Ripa museum is Juval, the 13th-century castle in Vinschgau where Messner lives with his family for part of the year, and which he opens to visitors. There

is an organic farm with animals on the premises, along with a sprawling collection of Asian masks and effigies. (The theme is holy mountains.) Messner's personal library, consisting mostly of books about Alpinism, is kept here in an ornately carved room.

Positioned at what was the highest place of the former Austro-Hungarian empire, the Ortles museum in Sulden am Ortler is 'devoted to the world of ice.' What this mostly means is that it is bone-chillingly cold inside. There are walking sticks, ice picks, skis, reportedly 200 years' worth of mountaineering boots, a rescue sled from 1940 and Sir Ernest Shackleton's binoculars. But most of the contents

are paintings, dozens from the late 19th and early 20th centuries and a not insignificant number of contemporary works, all of which depict ice.

Bolzano, the largest city in South Tyrol, is the site of Firmian, the largest museum. Housed in Sigmundskron Castle, which dates back to CE 945, it's focused vaguely on "man's encounter with the mountain."

There's an eclectic mix of exhibits and settings – Bob Dylan's 'Blowin' in the Wind' plays in a gallery devoted to those who died while climbing, and bronze figures from Himalayan legends look down from high in the castle's towers. Artefacts here include ancient and wildly inaccurate maps; old hiking

AT A GLANCE THE MESSNER MOUNTAIN MUSEUM

JUVAL

Location Juval Castle, Vinschgau
Elevation 1000 metres
Theme The religious dimension of the mountains

ORTLES

Location Sulden am Ortler
Elevation 1900 metres
Theme The world of ice

FIRMIAN

Location Sigmundskron Castle, near Bolzano
Elevation 340 metres
Theme The peaks, history of mountaineering, alpine tourism

RIPA

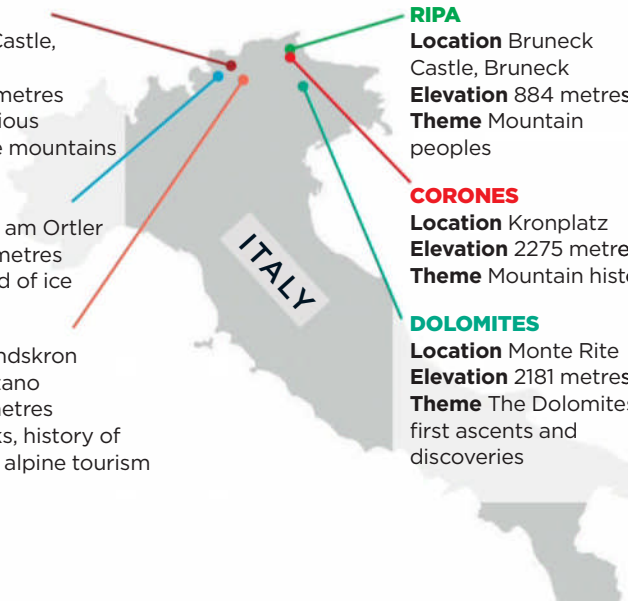
Location Bruneck Castle, Bruneck
Elevation 884 metres
Theme Mountain peoples

CORONES

Location Kronplatz
Elevation 2275 metres
Theme Mountain history

DOLOMITES

Location Monte Rite
Elevation 2181 metres
Theme The Dolomites – first ascents and discoveries



'boots' that were really just wooden paddles with hand-forged iron cleats hammered into footbeds made of straw; Nepalese crystals; a model heart in a case; leather-strapped goggles; and a Plexiglas chamber filled with 'Everest refuses' (rusty cans, discarded clothing, tarpaulins, a teapot).

"This is not a classical museum; it's not an art museum or a museum of natural science. It's a museum where I tell stories about the mountains," Messner had told me at Coronas.

He has sworn that Coronas will be the last of the museums. The plan is for his daughter Magdalena, who has studied both art history and economics, to take over the project.

I ASKED MESSNER why this museum will be the last. "There is no other issue," he said in a throaty German accent.

Issue?

"One museum is for the ice, one is for the rocks, one is on mountain people, one is on holy mountains and this one is on the traditional Alpinism," he says impatiently. "There is no other issue."

"Mountains are not fair or unfair – they are dangerous," Messner wrote.

Maybe that's the real appeal of climbing one, something that books and films and museums can't ever quite recreate. In a world that can so often feel rigged, there is an undeniable relief to experiencing so impersonal a struggle.

Perhaps that is why I quickly came to feel as though it were an absolute necessity that I climb to the rest of Messner's museums, all of which are accessible by car.

Messner's feats were to my 'climbing' what a professional swimmer's are to taking a bath, but I still found myself grinning with pride every time I made it to the top. **R**

By their early 20s, Reinhold Messner and younger brother Günther were among Europe's best climbers. In 1970, the brothers successfully reached the summit of Pakistan's 8126-metre Nanga Parbat. Tragically, however, only Reinhold survived the descent – losing seven toes and several fingertips to frostbite. The following year, Reinhold returned to try and find his brother's remains but was unable to do so. They were only found in 2005. In 1980, in true 'alpine-style' mountaineering (minimal equipment, no satellite phones), Messner completed the first solo ascent of Mount Everest without extra oxygen, crevasse ladders or the help of sherpas. He believes standard 'expedition-style' climbing is disrespectful and damaging to nature.

FROM T: THE NEW YORK TIMES STYLE MAGAZINE (NOVEMBER 12, 2015). © 2015 BY THE NEW YORK TIMES CO., NYTIMES.COM

THROWING A CURVE BALL

How old would you be if you didn't know how old you are?

SATCHEL PAIGE, FAMOUS US BASEBALL PLAYER



*Charles Lindbergh
in the cockpit of the
Spirit of St. Louis,
just before take-off*



BONUS READ

Charles Lindbergh's bravery 90 years
ago opened a door to the future

FLIGHT OVER THE ATLANTIC

BY DAN HAMPTON

FROM *THE FLIGHT: CHARLES LINDBERGH'S 1927
TRANS-ATLANTIC CROSSING*

CHARLES AUGUSTUS LINDBERGH *was a private, introspective man, and in later years, a controversial one. Son of a US congressman, he married socialite Anne Morrow. Their child was famously kidnapped, and found dead two months later. Lindbergh lived in Europe where he was criticised for opposing US involvement in World War II – although in the end he flew with Allied forces in the Pacific. After Lindbergh died in 1974, it was revealed that he'd had several extramarital affairs. He was a flawed hero, but a hero nonetheless, for nothing could take away from the sheer courage he exhibited over the Atlantic Ocean, 90 years ago.*

The cockpit reeked of petrol and glue, but the pilot ignored both smells. Slowly pushing the throttle forwards, he brought the roaring engine to its take-off revolutions. The aircraft strained against the wheel chocks, desperate to pull man and machine across the wet field. Leaning against the fabric-covered fuselage, 25-year-old Charles Lindbergh peered through the open window and down the mud-soaked runway.

Not that there was much he could see on this drizzly morning in Long Island, New York. Shredded curtains of rain hung from low, heavy clouds, and he could barely see the treeline at the field's eastern edge.

The grass runway is soggy and the damp air is not giving as much power to the motor as it should. The tachometer, which measures engine revolutions per minute, is low. That worries him, as does the slight tailwind. Lindbergh

had planned a sunrise take-off into the night-time easterly wind, but now the breeze was from the west. His wet boots slipped a bit on the metal rudder pedals. With smooth foot movements he 'walked the rudder', keeping the plane aligned on the runway, but without a view ahead it wasn't easy.

The tall, lanky former mail pilot – inevitably known as 'Slim' – had the main fuselage petrol tanks moved in front of the cockpit, which was safer in the event of an accident. This meant he had to use an 8-by-13-centimetre periscope to see straight ahead.

His eyes darted again to the tachometer. If anything was wrong with the engine it would show here first, but the needle is steady. The plane skidded a bit as Slim fought to keep it on the runway. The plane, called the *Spirit of St. Louis*, held 1700 litres (450 gallons) of petrol, producing a gross weight of over two tonnes (2.5 tons). It felt more



Lindbergh and the plane he flew solo across the Atlantic, in an undated photo

like an overloaded truck than an aeroplane. Slim could feel the stick wobble in his hands. Faster ... he had to get the plane moving faster.

Just metres from where he'd started, off the edge of the runway, was a black scorched area. A bent propeller blade was stuck upright in the burn, marking the crash eight months earlier of French flying ace René Fonck, causing the deaths of two crewmen.

Lindbergh bounced in his wicker seat. But he felt a difference. At 90 metres down the runway, the plane is faster. At 300 metres, and the stick is tighter. Slim felt air pressure pushing on the rudder through his boots.

Lindbergh stared out, searching for

a white handkerchief he'd tied on a stick. It was there as a warning that half the runway was gone. Roosevelt Field was almost 1.5 kilometres long, but was it long enough?

A white speck fluttering in the heavy air. The handkerchief! He should have been airborne by now. Was there too much fuel? He'd added an extra 95 litres at the very end. Was it the tailwind? Or the mushy runway?

The *Spirit* hits a puddle, splashing cold, dirty water along the cotton fabric fuselage. The wings wobble. Pull up!

The roar fills the cockpit. The wheels lift off, then settle. Lindbergh feels the mush again. But now it's different. The plane wants to fly, all 223 horses

throbbing through the stick. The propeller bites; the wings lift, and *Spirit* claws itself off the ground at 7.52 on Friday morning, May 20, 1927.

The Course Is Set

He staggered into the air. The line of trees flashed beneath the gleaming wet wheels. Then, through the spinning 2.7-metre propeller, he sees a hill ahead. There's not enough altitude. Tapping the rudder, Slim gently nudges the stick to the right. The aircraft answers ever so slightly, and they barely clear the hill.

He climbs to 30 metres. If the engine quits now, there's enough altitude and speed to make a controlled landing somewhere. He can breathe.

Lindbergh eases the throttle back to 1800 rpm, then 1750. He looks out the small windows and sees another plane. It's full of reporters, cameras sticking out of every window. 'Lucky Lindy', the press calls him. As if luck had anything to do with it.

LINDBERGH'S AMBITION, stubbornness and independent spirit went back to his grandfather, Ola Mansson, who was elected to the Swedish parliament in 1847. He was outspoken and self-righteous, backing rights for Jews, women and the infirm, and he acquired enemies as a result. He fathered a son in an extramarital affair with a waitress, and was brought up on charges of bribery and embezzlement. Ola escaped his problems



Above: Charles Lindbergh at age eight with his father, Charles August Lindbergh, in a photo taken about 1910

by emigrating to America with his waitress and young son. He changed his name to August Lindbergh, and became a farmer and blacksmith.

The son, Charles August, grew up on the farm in Minnesota, but went on to become a lawyer. After his first wife died, he remarried and had a son, Charles Augustus Lindbergh, born on February 4, 1902. The elder Lindbergh was elected to the US House of Representatives in 1906 and brought his family to Washington, DC.

Young Charles grew up in Washington, DC, but spent summers in Minnesota, where he relished the outdoor life, fishing, camping and hunting. He was physically tough, mentally introspective and emotionally reclusive.

In June 1912 his father arranged for young Charles to attend the Army Aeronautical trials in Virginia. An aeroplane raced a motorcar around

an oval track. That was when Lindbergh realised he wanted to be a pilot.

Lindbergh went to the University of Wisconsin to study engineering, but found the classroom stifling. He decided to go to the Lincoln Flying School in Nebraska, where he learned about aircraft maintenance and got his first opportunity to fly a plane.

PEERING OUT his window to compare landmarks against his map, Lindbergh swept his eyes ahead over the Long Island shoreline. Scanning the gauges he saw the oil pressure was good. Fuel pressure was steady. He had 1700 litres of fuel in five different tanks, enough for 6440 kilometres if headwinds weren't too stiff.

Lindbergh settled back in his wicker seat. Using his compass to navigate, he kept checking against the map across his knee. He knew if he was to survive the night, if he was to have a chance to make landfall in Ireland, he must stay as close as possible to the route he'd calculated weeks ago. His setting now was 066 degrees, but winds could blow him off course. As long as he was over land, he would use dead reckoning – fly from landmark to landmark. But beyond Newfoundland lay open ocean, and no references at all.

The inside of the cockpit was completely exposed, with no weight wasted on panelling or unnecessary finishes. Each gram saved meant an extra gram of fuel. For food he carried five sandwiches. When a reporter had

asked if that was enough, Slim had replied, "If I get to Paris I won't need any more, and if I don't get to Paris I won't need any more either."

With the immense, curving fish-hook of Cape Cod off his right wing, he tugs out the chart he'll use for the rest of the flight. Called a Mercator Projection, it projects the three-dimensional Earth onto a two-dimensional surface. The longitude and latitude lines appear straight, at right angles to one another, and though unrealistic it allows huge distances to be plotted on a chart.

Slim nudges the stick and gently kicks the rudder, watching the compass wobble around to 071. He'll hold this for the next 160 kilometres, then check to the right, adjusting for the Earth's curve. His Wright Whirlwind engine is steady at 1760 rpm and other gauges read normal as he switches to the nose fuel tank. Paris is still 5600 kilometres away. But the course is set, and *Spirit* is performing perfectly.

Sudden Turbulence

Nearly 320 kilometres past Cape Cod and into the Gulf of Maine, Slim yawned and tried to stretch out the cramps. He hadn't slept much in the days leading up to take-off. *I'm a little tired*, he admitted.

He noticed mud splattered under the right wing, then another clump under the left. How much did they weigh? How much drag did they generate? Even slight resistance was resistance;

everything cost something in fuel and distance.

I'm half asleep. Stop it!

Slim stuck his hand out the window. Fresh air hit him in the face. He should have slept more, but hadn't been able to. Too many details, too many interruptions ... and apprehension.

Wriggling in the seat, he forced himself to look at the instruments, to the gauges, then the horizon. Reaching Nova Scotia is the first true test of navigation so he focuses on the chart across his knees. The wind was blowing steadily at 24 km/h, pushing *Spirit* to the southeast. He corrected as best he could by crabbing left, ten degrees into the wind.

At 11.52 am, there it was. Land. The Nova Scotia coastline. Squinting at his map, he matches printed lines against the land below and knows by its shape this must be St Mary's Bay.

Relief envelops him – the relief only pilots and mariners feel when they find themselves exactly where they'd planned. This landfall proved that his instruments worked, that the course he'd pencilled in could bring him safely to land after hours over water.

Nova Scotia's harsh terrain unrolled beneath his wings. The wind suddenly catches his chart, lifting it towards the open window. Startled, Slim jerks it back and tucks it under his leg. That would be a calamity, to be forced back in failure because of a sheet of paper. He has two window panes stored behind his seat, and he slides them in.

Suddenly the plane bolted upwards and Slim's hand tightened around the stick. Everything loose in the cockpit bounced. He watched the wingtips flex, and out of habit Slim's left hand went to the throttle, ready to power out of turbulence. Then the plane lurched back to level flight.

The horizon vanished in a solid wall of cloud. Warm air was rising fast, and curtains of rain swept across the ground ahead. As *Spirit* bucked and yawed in the turbulence, Lindbergh watched the wings. They were 3 metres longer than normal to lift the 1134 kilograms of extra load, mostly fuel, needed for the 5800-kilometre flight. But the longer wings would bend more as they protruded further from the fuselage.

The storm tossed the aircraft up, down and sideways, while blowing it further southeast off course. Slim's eyes were wide as he fought for control. With rudder pedals smacking his soles, he grabbed the stick with both hands.

The squalls got worse. He could see through the first one, but others marched towards him across the sky like dark sheets. Water beats furiously against *Spirit*, and the propeller is a whirling silver disk with vapour spinning off. Giving up on trying to hold a bearing, Slim threads his way east through the storm. Maybe the storm breaks up closer to the coast. Maybe by avoiding the worst parts, the wings won't collapse.

Suddenly *Spirit* shot into the clear,

bright sunlight. The salty air was fresh, visibility now unlimited. Off to his left was the port of Sydney, and ahead was Scatarie Island, according to the chart, at the mouth of Mira Bay.

The sea is no longer a stranger and he revels in that thought. As I struck Nova Scotia, I will strike Newfoundland. And as I strike Newfoundland, *I will strike Europe.*

Nothing But Ocean

Flying alone had sounded so logical when he was in St Louis and New York. But now? Slim fights the overwhelming urge to let his head droop. *Open your eyes!*

Slim shifts position, leans forwards and blinks rapidly. He checks the instruments. His back and shoulders ache. The sun is sinking behind him. *How can I get through the night?* he wonders. Not to mention the dawn, and another day.

He holds 153 km/h for another hour. Below him the ocean's surface shimmers in the setting sun, and he notices the strong west wind flattens the waves. This is good for him, adding a tailwind of maybe 15 knots, pushing *Spirit* along that much faster.

Craning forwards, Lindbergh sees a coastline ahead. Newfoundland. The final great stepping stone before nearly 3200 kilometres of dark ocean. He passes over Placentia Bay, nudges higher over the Avalon Peninsula, then across Conception Bay to St John's.

The buildings are painted yellow,

red and blue. Slim pushes the stick forwards and dives towards the rooftops, levelling off just above the chimneys. He sees scores of white dots below, faces turned up towards the shiny aeroplane in the dying light. Hopefully, someone will send a wire out, and the world will know where he is.

For the initial 11 hours, covering about 1800 kilometres, Lindbergh held the reassurance that he was never too far from land. But no more. From now until Ireland, nearly 3200 kilometres distant, there is nothing but ocean. Climbing to 244 metres,



THE HORIZON
VANISHED IN A SOLID
WALL OF CLOUD.
THE *SPIRIT* BUCKED
AND YAWED IN THE
TURBULENCE

Slim stared out his windows, but now it was too dark to gauge the wind.

Looking up through the skylight, Slim sees stars. He can find the North Star well enough, though celestial navigation by peering through the skylight of an aircraft is hardly accurate. Still, Europe is a continent. How could he miss it if he flies east long enough?

There's fog below, forcing Slim into a gradual climb up through 1500 metres. The US Weather Bureau showed a low-pressure area extending east from

Newfoundland to the mid-Atlantic. High pressure from the south was supposed to push the front north, but what if it was stalled?

Levelling off at 3000 metres, he flew among the rolling plateaus of clouds, still correcting left for the winds. The air is thinner, so he burns less fuel. But it's cold. He zips his flying suit up, pulls on a wool-lined helmet and tugs leather mittens over his fingers.

Shredded bits of cloud cling to his whirling propeller. It's time to go on instruments, to fly blind. Anything he sees outside now will just be a distraction. He must disregard his senses and put his faith in a few dials.

Suddenly everything beyond the windows vanishes. He's in the clouds now. Time passes. Ten minutes or 30, he's not quite sure. He pulls off his left mitten, sticks his arm out the window and feels sharp pinpricks. *Oh no, not that!* He grabs his torch and aims the beam outside. He squints at the bottom of the wing. The leading edges are bright with ice.

Ice can kill. It disfigures the wing, disrupts airflow and causes a stall. He must get back into clear air.

Left boot forwards against the pedal. He nudges the stick forwards and left. He shoves the throttle forwards. The *Spirit* bobbles its way through a turn, descending ... skidding. Add power, pull back on the stick. He rolls the wings level. The airspeed is steady. But the compass is swinging wildly. Rough air.

What's that? Slim's eyes shift outside. The *Spirit* is no longer wrapped in grey. The cloud's drooping wet fingers have released him, and the sky is clear above.

"Which Way Is Ireland?"

For the next hour he just flies, concentrating on his instruments. He can see well enough to avoid the big cloud masses, and it's warmer in the cockpit. He may have crossed into the warmer waters of the Gulf Stream.

The *Spirit* wings eastward through the night at 3000 metres until there is depth to the sky. There is colour, a faint streak of pink. Dawn.

The dread of night is over. Yet his whole body screams for sleep. Holding the stick between his knees, Slim pumps his arms as if running. He pulls his canteen off the rack and takes a swallow. He's had no food, but he's not hungry, and besides, eating might make him more sleepy.

Shoving the stick forwards, he dives through a cloud then pulls up sharply into clear air on the other side. Physically flying helps keep him awake.

Slim resets the throttle, then realises he is not alone. There are human shapes beside him, talking about navigation. Who are these phantoms? Are they here to keep him awake? He wonders if he is dead. *Am I crossing the bridge, he asks, beyond the point from which I can bring my vision back to Earth and men?*

Suddenly he stiffens, eyes wide



The course of Lindbergh's historic solo non-stop flight from New York to Paris

with shock. Land! It can't be. He's still over the Atlantic. But through the window he peers out at a haze-covered coastline. It's purple and rocky.

He shakes his head, rubs his eyes. It's still there. Could it be Greenland, or Iceland? Could his navigation be that far off? He gropes for his chart, starts to bank left. Then he stops. It's nonsense, he decides, to be lured off course by fog islands in the ocean.

Slim has been flying for over 24 hours. There is a constant burning deep behind his eyes. He drops down towards the ocean again, sticks his face outside and fills his lungs with salt air. He feels better, except for a layer of clouds forming off to the northeast. Another storm maybe.

Weather had always been a problem when Slim flew the mail. He had spent a year in US Army flight training, but the Air Service was so small there was no need for new pilots. So Slim found himself in St Louis, flying the mail. Air mail pilots used all sorts of tricks

in the fog, including dropping a flare and using the light to land in a field. It was during one of those air-mail flights that he began to plan this trip.

Slim tries to relax, but no position is comfortable. He looks outside again and there, a few kilometres away: a bobbing dark speck on the waves. A boat. Several boats. He aims *Spirit* towards the little vessels. Levelling off at 15 metres he angles the plane for a better view. Fishing vessels. Far too small to be hundreds of kilometres out to sea.

He circles. A face appears from the cabin porthole. Slim shouts, "Which way is Ireland?"

No response.

He circles the boat three times. The face doesn't move. He wants to remain close, see more men, but that is not possible. Rolling out 100 metres above the waves, Slim sets a new course. Land must be close. It would be possible if the winds had blown him further eastward during the night.

Looking northeast, Slim notes that the horizon has ominously darkened with low clouds. Or maybe fog. Or ...

Can it possibly be land? He blinks, looks away, and stares again. He wonders if it could be a mirage like the one he saw earlier. No, it is definitely land. But where? Ireland?

The Future Has Changed

Craning his neck, Lindbergh can see an island on the south side of a long, tapering bay. He studies his chart. There's a place where it all fits. Dingle Bay and the island of Valentia.

Slim drops the nose and spirals down over the little town. People run out to the streets and wave. Slim levels off at 30 metres, leans out the window and, grinning ear to ear, waves back.

The wicker seat doesn't seem so hard anymore. The Whirlwind's throbbing is comfortable. He continues southeast across County Kerry, then on to Plymouth, England. He knows he has plenty of fuel left – he estimates at least ten hours of flying time. And he thinks of all the others who tried to make this same crossing, especially the two Frenchmen, Charles Nungesser and Francois Coli, who had vanished over the Atlantic two weeks prior.

Out ahead, past the blur of the propeller, the eastern horizon is darkening slightly. He heads east across the English Channel until he spies the coast of France. He cuts across the



Flying above welcoming crowds at Croydon aerodrome in South London, following his transatlantic crossing

Baie de la Seine and he follows the great river all the way to Paris. He is nearly three hours ahead of schedule, and wonders if anybody will be waiting for him at Le Bourget. Flying at rooftop height, he sees yellow squares of light from windows, and below him people run out of their homes to see what is making that great noise. He goes back up to 1200 metres and sees a glow rising over the horizon, then an unmistakable column of lights: the Eiffel Tower!

He knows that Le Bourget lies about 10 kilometres northwest of the city. Holding 145 km/h, he sees a black patch lined with lights. Is this the right place?

He flies on a few kilometres more,

but the lights thin out. There is nothing ahead but the scattered yellow dots of farms. That had to be Le Bourget.

Slim dips the wing and boots the rudder and descends to 760 m. When the lights are visible again he squints down and sees buildings. One is unmistakably a hangar. He takes a low pass to make sure the surface is clear. He then makes a rectangle above the airport, to get enough height and distance to turn back for the landing.

The plane pitches as he aims for the grassy field. The surface does not look flat. Slim holds the nose a few metres off the ground, then jams the throttle forwards. The *Spirit* lurches forwards and soars away from Earth.

He checks the gauges one last time. He summons all his conviction that this is the correct field, that he has made it to Paris. Ninety metres to go. One wing down, then up, then dropping again towards the line of cars. Airspeed 130 km/h. He can see the patch of ground beyond the hangars.

Nine metres. Hangars flash by both wingtips. The wheels touch at 10.22pm. The tail drops and makes contact. Slim taps the rudder pedals to keep the nose straight. He's down!

He slows, then loops the aircraft back towards the buildings. Rolling forwards slowly, he peers ahead. Thousands of people. A surging wall of people running towards him.

Lurching to a stop, Charles Lindbergh and the *Spirit of St. Louis* are once again part of the human world – a world that has just contracted beyond belief or expectation. They have thrown open a window that will never close. And for those who witnessed history in Paris on May 21, 1927, and for all of us yet to come, the future has changed forever. **R**

Lindbergh received a hero's welcome in France, Belgium, England and the US. A ticker tape parade in New York was attended by an estimated three to four million people. While making the first-ever solo non-stop flight from New York to Paris had vaulted him to international stardom and fortune, he was later visited by tragedy in 1932, when his 20-month-old son, Charles August Lindbergh Jr., was kidnapped and murdered in what was dubbed 'the crime of the century'. Bruno Richard Hauptmann was tried, convicted and executed for the crime.

Puzzle Answers *See page 120*

FIGURE SKETCHES

 In each title, the first digit represents the outer shape and the second digit represents the shape of the inner notches.
1 = square, 2 = pentagon, 3 = hexagon, 4 = axe head, 5 = diamond, 6 = triangle, 7 = circle.

CHANGE COUNTER

\$9.60. One 'set' of 10 five-cent pieces and 7 ten-cent pieces totals \$1.20. Seven times \$1.20 = \$8.40 (too low), and nine times \$1.20 = \$10.80 (too high), so there must be eight sets.

MAGIC SQUARE

2	5	2
3	3	3
4	1	4

NUCKET OF TRUTH

B

SUDOKU

3	8	2	4	5	6	7	9	1
5	9	1	8	7	3	6	4	2
4	6	7	9	1	2	3	8	5
1	3	4	5	2	9	8	6	7
8	5	9	7	6	1	4	2	3
2	7	6	3	8	4	5	1	9
7	1	5	2	4	8	9	3	6
9	2	8	6	3	7	1	5	4
6	4	3	1	9	5	2	7	8

out & about

NEWS

BOOKS

FILMS

DVDS



Uber Promises Flying Taxis by 2020

On the heels of the successful test of a prototype electric vertical take-off and landing (VTOL) aircraft in April by Munich-based Lilium Aviation, ride-hailing firm Uber has pledged to bring the technology to the wider public by decade's end. Uber plans to facilitate on-demand urban aviation by hiring flying taxis from the likes of Lilium and helping to manage the network of 'vertiports' crucial to their operation. These vertiports would be housed atop repurposed car parks, helipads and other locations. "We just want to usher it in as fast as possible because we all want to live in this world," said Jeff Holden, Uber Technologies chief product officer, in Dallas in April. With Uber promising to create a network of VTOLs in Dallas and Dubai by 2020, the impossible dream of flying cars seems one step closer to becoming a reality.

Greg Barton

This artist's vision of a 'vertiport' for flying taxis may not be as far into the future as you imagine





KINGSMAN: THE GOLDEN CIRCLE

(Comedy, Action, Adventure)

 Matthew Vaughn returns to direct this second instalment of the comic spy book series. 'Eggsy' (Taron Egerton), a fully trained secret agent with Kingsman, is put to the test when their headquarters is destroyed and the world held hostage. In their quest to discover the villain responsible, the secret agents find allies in a spy organisation in the US known as Statesman. The two spy organisations unite to overthrow a common enemy and save the world. Colin Firth is joined by Halle Berry, Jeff Bridges, Channing Tatum and Julianne Moore as the evil Poppy. This light-hearted movie is what you'd expect from a comic book story.

IKEA's Award-Winning Refugee Shelters



Swedish furniture giant IKEA has applied its flat-pack approach to the creation of temporary shelters for refugees. The 17.5-square-metre Better Shelter consists of a steel frame clad with insulated polypropylene panels and a solar panel on the roof; it can be assembled by four people in four hours using only a hammer.

"If you compare life in the tents and life in these shelters, it's a thousand times better," says Saffa Hameed, 34, who has experienced both at the Al Jamea'a refugee camp in Baghdad. "It's more protected," agrees Saffa's wife, Hind. "We have a door we can lock. It's safer and cleaner." Developed by the not-for-profit IKEA Foundation and the United Nations Refugee Agency, the shelter won London's Design Museum's Beazley Design of the Year Award in 2016. At US\$1250, it's around twice the cost of a typical emergency tent, but lasts six times longer.

Sources: Time Pulse and The Guardian

More secure and durable than a tent, the Better Shelters give displaced people safer temporary shelter



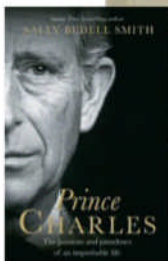
PRINCE CHARLES

The passions and paradoxes of an improbable life

Sally Bedell Smith

Penguin/Michael Joseph

Being in the shadow of the throne, particularly a shadow of such magnitude, has shaped the personality and life of king-in-waiting HRH Prince Charles. For all its pomp and privilege, it seems in many ways an unenviable life. And yet, Prince Charles has carved out a place and a purpose for himself and, through his



entrepreneurial pursuits, especially The Prince's Trust, has improved the lives of hundreds of thousands of young people in Britain. Eminent biographer Sally Bedell Smith takes us from Charles's lonely childhood and difficult

schooling years, through his personal relationships and intellectual and business pursuits to the place, after a half century 'in waiting', he occupies today. Laying bare the contradictions of a man who is more complicated than we knew, it is both a sympathetic and an unvarnished account.



PHOTO (CHARLES): GETTY IMAGES



The End of Paper Produce Stickers?

The problem with those sticky labels you find on fruit in the supermarket isn't just that they stick to your fingers when you remove them – they're also a waste of paper and energy and they clog up the sewer system. Now Spanish company Laser Food has devised a technique called 'natural branding' that imprints produce with a laser mark. Dutch fruit and vegetable supplier Nature & More and Swedish supermarket ICA have trialed the new laser, which removes pigment from a fruit's skin and the mark is removed when the skin is peeled. "The calculations are that it costs the same, but sustainability for our consumers and ourselves is the biggest gain," says Peter Hagg of ICA. "I really hope it spreads."

Source: *The Guardian*



STREET ART

Discover street art in 140 hotspots in 42 cities worldwide

Lonely Planet



Here is street art on the grand scale. These virtuoso paintings are executed boldly and brightly across buildings around the world by artists with something worth saying. Landscapes, fantasies, abstracts, portraits, optical illusions, cartoons, politically charged visual messages – all created with respect for their environment and the communities within them. From a giant somersaulting upside-down woman in the Ukraine to eye-popping geometrics in San Francisco, from rabbit-like creatures with a lugubrious fish in Sweden to red roses in full bloom in Marrakesh, art in public places never looked so good. *Street Art* presents unconventional attractions you could plan your holiday around.



DUNKIRK

Action, History, Thriller



Set during WWII, the film revolves around the evacuation of Dunkirk, France. From May 26 to June 4, 1940, Allied troops were surrounded by enemy forces, trapped on the beach, as the Nazis closed in. Under cover from British and French forces, troops were slowly evacuated using every serviceable vessel that could be found. By the end of this heroic mission, almost 340,000 French, British, Belgian and Canadian soldiers were evacuated. The movie recreates the tension and suspense caused by the extreme urgency of this dire situation.





EVERYTHING, EVERYTHING

(Romance, Drama)

Maddy Whittier (Amandla Stenberg) is a smart, curious and imaginative 18 year old who is confined to her hermetically sealed house because she suffers from severe immunodeficiency. If she goes outside, she will most likely die. Her world revolves around her mother, her nurse and her illness until Olly Bright (Nick Robinson) moves in next door. Communicating only via text messages, phone conversations, emails and glimpses of one another through windows, Olly and Maddy form a close bond. Olly won't let her illness stand in the way of their relationship.

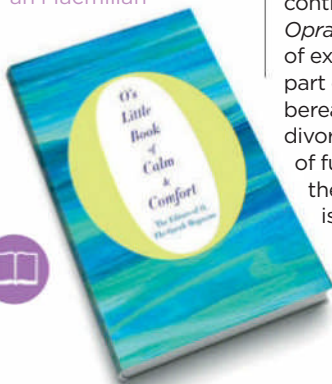
This coming-of-age movie, based on Nicola Yoon's novel of the same name, pulls at the heart strings of the young and young at heart.



O'S LITTLE BOOK OF CALM & COMFORT

The editors of *O, The Oprah Magazine*

Pan Macmillan



At times, we all need wise words to help us find a way forwards. This beautiful collection of pieces by various contributors to *O, The Oprah Magazine* speaks of experiences that are part of being human: bereavement, illness, divorce, ageing, lack of fulfilment. Though they are all confronting issues, a vibrant spirit emanates from every essay, and

each measures out calm and comfort in different insightful ways. Some are laugh-out-loud funny, making us wake up to ourselves. One of the most comforting essays is Nora Ephron's homage to the landmark books she read in her life, and the joy and solace she experienced from the worlds they conjured. Feel like curling up in bed with a good book? Try this one first.



TINY TABLETOP GARDENS

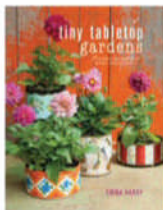
35 projects for super-small spaces – outdoors and in

Emma Hardy

CICO BOOKS



Many of us are downsizing our living spaces these days, letting go of a big garden or outdoor space in the process. But that doesn't mean having to miss out on the pleasures of gardening. No matter how limited your access to external areas, you can still bring colour and vitality into your life through the clever use of plants. The projects in this book are cheerful, inspirational and, best of all, achievable. Using cans, teapots, jugs, trays, glass jars and even ladies, you'll see how easy it is to grow portable greenery, flowers and edible plants in small spaces. With step-by-step instructions and advice on maintenance, these tiny gardens play with colour, texture, fragrance and shapes in imaginative ways. Top marks for their happiness factor.



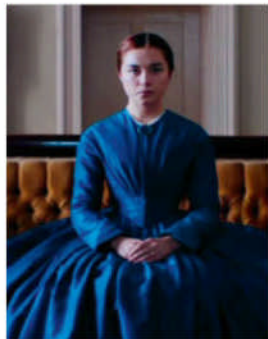
LADY MACBETH

(Drama)



In this film, set in 1865 in England, teenager Katherine (Florence Pugh) is married off to Alexander (Paul Hilton), middle-aged son of a mining boss, Boris (Christopher Fairbank). A controlling and brutish husband, Alexander is as unhappy as Katherine. He holds Katherine captive, keeping her indoors at all times.

But when Alexander and Boris are called away, Katherine ventures out to the moorlands, crossing paths with groomsman Sebastian (Cosmo Jarvis). Their bond is instant, physical and emotional but this cross-class romance soon takes a dark turn as Katherine goes to desperate lengths to protect her newfound fulfilment.



Puzzles

Challenge yourself by solving these puzzles and mind stretchers, then check your answers on page 113.

BY MARCEL DANESI

FIGURE SKETCHES (DIFFICULT)

The artist Mathias Wizzini is showing his latest masterpieces. Five of his works are displayed here in Reader's Digest, and we have a sneak peek at the title of a sixth. Logically, what should 26 look like?



"61"



"37"



"63"



"45"



"21"



"26"

CHANGE COUNTER (MODERATELY DIFFICULT)

Priya's coin collection contains only five-cent pieces and ten-cent pieces, and she has 10 five-cent pieces for every 7 ten-cent pieces. If her coins all add up to a total of between \$9 and \$10.50, what is that precise value?



MAGIC SQUARE (MODERATELY DIFFICULT)

Place a number from 1 to 9 in each empty cell of this square so that each row, each column and both main diagonals add up to the same sum. (You must determine this sum.) The same number can appear more than once.

2	?	?
?	3	?
4	?	?

		2	4		6	7		
	9			7			4	
4		7				3		5
1				2				7
	5	9				4	2	
2				8				9
7		5				9		6
	2			3			5	
		3	1		5	2		

TO SOLVE THIS SUDOKU ...

You have to put a number from 1 to 9 in each square so that:

- every horizontal row and vertical column contains all nine numerals (1-9) without repeating any of them;
- each of the 3 x 3 boxes has all nine numerals, none repeated.



A



B



C

NUGGET OF TRUTH

A gold nugget is in one of these three boxes. Can you locate it if only one of the inscriptions is true?

BRAIN POWER
brought to you by



FRIXION ERASABLE PEN



TEST YOUR GENERAL KNOWLEDGE

Trivia

1. The symbol for iron, Fe, comes from what Latin word? **2 points**
2. The velocipede was the forerunner of what modern mode of transport? **1 point**
3. If your last name is 'Fletcher', one of your ancestors probably made or sold what object? **2 points**
4. What is the main religion of Bangladesh? **1 point**
5. What language supplied us with the term *klutz*? **1 point**
6. From what movie is the quote "Keep your friends close, and your enemies closer"? **1 point**
7. What are the first leaves to appear in a germinating plant? **2 points**
8. In which country is the Cape of Good Hope? **1 point**
9. How many Earth-sized

planets were discovered orbiting a star called TRAPPIST-1 in

February 2017? **2 points**

10. Why is the banoffee pie so named? **1 point**

11. True or false: The Old Testament Book of Leviticus prohibits the consumption of all seafood that is not fish. **1 point**

12. Which countries does the Gobi Desert span? **2 points**

13. Are Dalmatian puppies born with or without spots? **1 point**

14. Do identical twins have identical fingerprints? **1 point**

15. True or false: Actor Harrison Ford expressed the wish to see his character Han Solo die before the making of *Return of the Jedi*? **1 point**



16-20 Gold medal 11-15 Silver medal 6-10 Bronze medal 0-5 Wooden spoon

ANSWERS: 1. From the Latin word for iron, *ferrum*. 2. The bicycle. 3. Arrows. 4. Islam. 5. Yiddish. 6. The *Godfather Part II* (1974). 7. Cotyledons. 8. South Africa. 9. Seven. They are approximately 40 light years away from Earth. 10. It consists largely of banana and toffee ('ban' plus 'offee'). 11. True. 12. Mongolia, China. 13. Without. The first spots start to appear 3-4 weeks after birth. They continue to develop spots throughout their life, but at a much slower rate. 14. No. 15. True.

IT PAYS TO INCREASE YOUR

Word Power

Crossword Challenge

This month we feature words from one of the world's toughest crossword contests. Competitors encountered these words over eight challenging rounds in last year's American Crossword Puzzle Tournament, an annual contest directed by Will Shortz, crossword editor for the New York Times. If you feel puzzled, peek at the next page for answers.

BY EMILY COX & HENRY RATHVON

1. bugbear *n.* – A: petty crime.
B: character flaw. C: object of dread.

2. sopor *n.* – A: salty taste. B: deep sleep. C: second-year student.

3. parlance *n.* – A: manner of speaking. B: secret meeting.
C: equality.

4. prate *v.* – A: chatter. B: criticise.
C: make a grand show.

5. bireme *n.* – A: ancient ship propelled by oars. B: marshy tract.
C: case of illogic.

6. tiki *n.* – A: kitschy cocktail shaker.
B: wooden or stone image of a Polynesian god. C: curry sauce.

7. weir *n.* – A: ghost. B: mirror image. C: dam in a stream or river.

8. ovine *adj.* – A: of eggs. B: of sheep.
C: of grapes.

9. anathema *n.* – A: main topic or theme. B: total opposite.
C: someone or something intensely disliked.

10. acolyte *n.* – A: spiritual healer.
B: circle of stones. C: follower.

11. vituperate *v.* – A: give new life to. B: hiss like a snake. C: use harsh language.

12. lasciviously *adv.* – A: with lust.
B: in a careless way. C: snidely.

13. tittle *n.* – A: dot in writing.
B: small songbird. C: mob snitch.

14. auspices *n.* – A: flavourings.
B: terms of forgiveness.
C: patronage.

15. arboreal *adj.* – A: from the north. B: about winds.
C: concerning trees.

Answers

1. bugbear – [C] object of dread. Rain is the biggest bugbear for the organisers of our town's annual autumn festival.

2. sopor – [B] deep sleep. Rip Van Winkle wasn't just napping – he was in a doozy of a sopor.

3. parlance – [A] manner of speaking. Juan's keynote speech was 'mic drop' good, to use the current parlance.

4. prate – [A] chatter. Do you have anything useful to tell me, or are you just prating into the air?

5. bireme – [A] ancient ship propelled by oars. Don't the centipede's legs remind you of the oars on a Roman bireme?

6. tiki – [B] wooden or stone image of a Polynesian god. I travelled to Maui and returned with a lei, a ukulele and a wooden tiki.

7. weir – [C] dam in a stream or river. The river's weir helps to prevent flooding.

8. ovine – [B] of sheep. The ovine residents of our farm always bleat loudly when they're sheared.

9. anathema – [C] someone or something intensely disliked. I don't mind snakes, but spiders are anathema.

10. acolyte – [C] follower. We couldn't even hear the speaker over the chants of his fervent acolytes.

11. vituperate – [C] use harsh language. You will get further by being polite than by vituperating at full volume.

12. lasciviously – [A] with lust. Ali dipped her finger into the bowl of vanilla icing and then licked it lasciviously.

13. tittle – [A] dot in writing. Ryan meticulously dots each 'i' with a perfect tittle.

14. auspices – [C] patronage. Under the auspices of her mother, little Courtenay has opened a lemonade stand.

15. arboreal – [C] concerning trees. The birds in my backyard prefer their arboreal nests to my adorable birdhouses.

FEELING CROSS?

Fans of crosswords may humorously call themselves *cruciverbalists*. This term for puzzle aficionados is stitched together from the Latin *crux* (for 'cross') and *verbum* (for 'word'). Of course, a tormented solver might point out that *crux* is also at the root of *excruciating* ('painful') and related to *crucible* ('severe test') – and switch to word searches.

VOCABULARY RATINGS

9 & below: novice

10–12: maven

13–15: Word Power wizard

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